

1989 ANNUAL REPORT

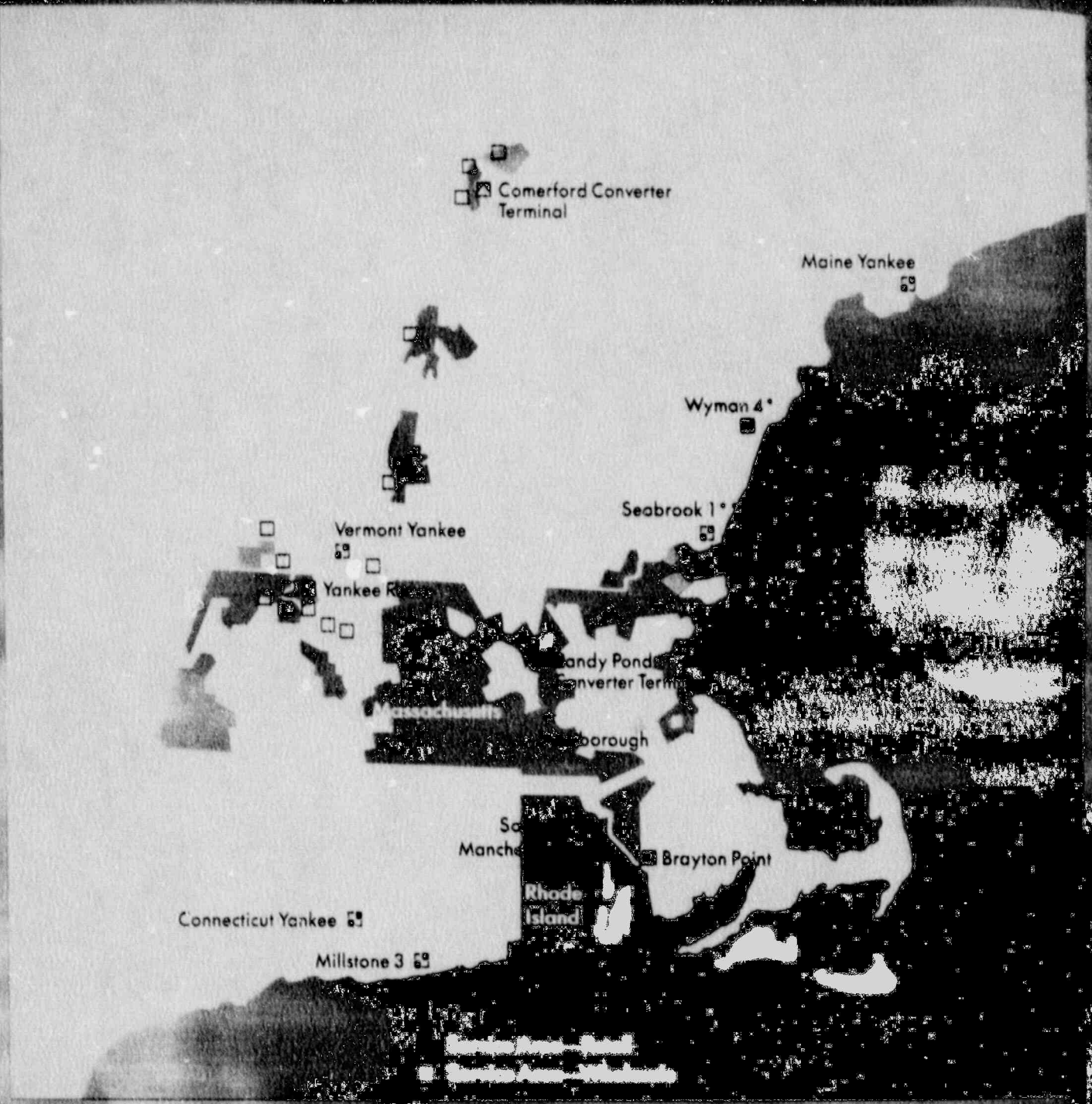
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 New England Electric System

REPORT

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New England Electric System



Legend

The New England Electric System is a consortium of utilities serving the New England region. The system is owned and operated by the New England Power Pool, a consortium of utilities from Connecticut, Massachusetts, New Hampshire, Rhode Island, and Vermont. The system is a major source of electricity in the region.

- Diagonal line = Converter Terminal
- Circle = Nuclear Power Plant
- Square = Conventional Power Plant

F I N A N C I A L H I G H L I G H T S

	1989	1988
Earnings (loss) per average share	\$ 2.36	\$ (.94)
Earnings per average share excluding 1988 rate settlement write-down (Note C)		\$ 2.20
Dividends declared per share	\$ 2.04	\$ 2.04
Return on average common equity	12.6%	11.2%*
Book value per share—year end	\$19.24	\$18.33
Market price per share—year end	\$28¾	\$24
Growth in kilowatthour (KWH) sales to ultimate customers	2.7%	5.9%
Cost per KWH to ultimate customers (cents)	7.28	6.92

* Return on average common equity in 1988 is calculated using the \$2.20 earnings per average share.

New England Electric System (NEES) is a public utility holding company headquartered in Westborough, Massachusetts. Subsidiaries include three retail operating companies—Massachusetts Electric Company, which serves 906,000 customers in 146 Massachusetts communities; The Narragansett Electric Company, which serves 314,000 customers in 27 Rhode Island communities; and Granite State Electric Company, which serves 34,000 customers in 21 New Hampshire communities. Other subsidiaries include a wholesale generating company, New England Power Company, which operates 21 generating stations; an oil and gas exploration and fuels company, New England Energy Incorporated; three transmission service companies: New England Electric Transmission Corporation, New England Hydro-Transmission Corporation, and New England Hydro-Transmission Electric Company, Inc.; a wholesale electric generation company, Narragansett Energy Resources Company; a conservation and energy management services company, NEES Energy, Inc.; and a service company, New England Power Service Company.

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DEAR SHAREHOLDER:



During the turbulence of the past several decades, New England Electric System (NEES) has often managed to be a step ahead of other electric utilities. We are committed to staying that step ahead throughout the 1990s—raising shareholder value, controlling cost per kilowatthour, maintaining a reliable supply of electricity, and improving customer service and environmental performance. This is no small challenge, as we will be compared to some very fine electric utilities and will increasingly face new kinds of competition.

In 1989, our major achievement was to rebuild earnings to \$2.36 per average share. This represents a 12.6 percent return on average common equity.

Among other key accomplishments, we:

- obtained a rate order in Rhode Island that will make our cutting-edge energy conservation programs in 1990 a profitable component of our business in that state,
- maintained our position as the second-lowest-cost provider among major electric utilities in New England,
- completed major construction of the U.S. portion of the Phase 2

transmission facilities connecting Hydro-Quebec and New England, and began testing key equipment,

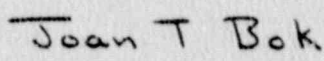
- added about 45 cents to the book value of each of your common shares through a sale in November of four million new shares at a substantial market-to-book premium,
- settled an arbitration case and concluded the sale of our share of the coal ship *Energy Independence*, removing a potential liability and providing a nonrecurring contribution to net income of 16 cents per average share,
- obtained approval of rate increases at the wholesale and retail levels, and
- welcomed a new director to the NEES board—John Kucharski, chairman and chief executive officer of EG&G, Inc., who has substantial experience with the business, political and environmental issues that affect our industry.

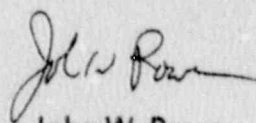
During the year, we participated in the bidding for Public Service Company of New Hampshire, but withdrew when the purchase price, and rate levels required to justify that price, became too high. While we desired to make this acquisition, our withdrawal from this process exemplifies our commitment to shareholder and customer value.

We are pleased to report the increasing likelihood that the Seabrook 1 nuclear unit will enter service. If this occurs in 1990, and various other conditions are met, we will be able to reverse a portion of our 1988 rate settlement write-down, which could increase 1990 earnings by about \$115 million after tax.

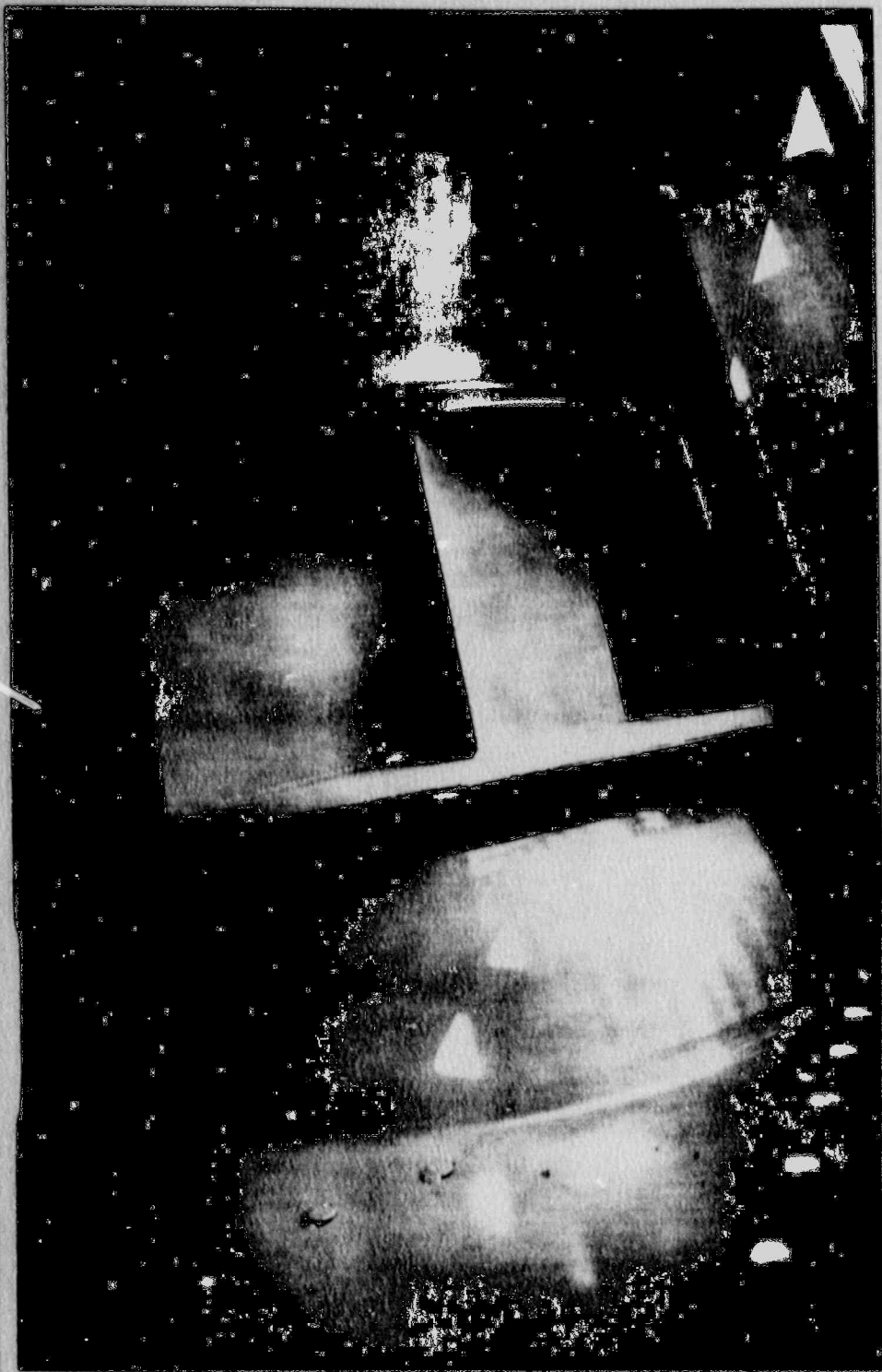
In 1990, we will continue our attention to the fundamentals of our business: rebuilding earnings for shareholders and providing reliable, economical electrical service to customers. Returns on equity for utilities have been on a downward trend, and load growth in New England is becoming more moderate. With our low rates, responsive service and sound regulatory reputation, we believe we are well positioned to meet these challenges.

The continuing commitment of our 5,600 employees to innovation, quality and customer satisfaction will keep NEES a step ahead.


Joan T. Bok
Chairman


John W. Rowe
President and Chief Executive Officer
February 28, 1990

C O N S E R V A T I O N



One of the most significant applications of storage cooling equipment at commercial/industrial sites. This technology is more economical than conventional air conditioning, as it draws most of its power during off-peak hours (nights and weekends).

"A step ahead" characterizes much of NEES' recent history. Guided by our long-range plan, NEESPLAN, our employees have achieved many "firsts" in developing energy conservation and load management (C&LM), contracting for alternate energy, improving existing generating facilities and finding ways of providing better service.

Energy conservation

Douglas Foy, executive director of the Conservation Law Foundation of New England, describes the NEES companies' C&LM effort as "currently the most ambitious energy-efficiency program in this region, and one that, when fully implemented, will be the most sophisticated and comprehensive in the nation." The Conservation Law Foundation is an energy conservation and environmental advocate and has assisted in developing conservation programs throughout New England. Since 1988, it has been a participant in developing C&LM programs for the NEES companies.

At year-end 1989, a dozen programs were in place, helping customers make energy-efficiency

improvements in lighting, cooling, water heating, building design and other areas. We invested \$41 million in this effort in 1989 with an additional \$65 million earmarked for 1990.

Among measures to strengthen an already effective effort, we developed new services for the commercial/industrial new-building market; placed Blue Ribbon tags at retail stores to direct consumers to the most energy-efficient appliances; and introduced a program that makes free conservation improvements within entire residential neighborhoods. We also redesigned certain rates to encourage greater energy efficiency by both wholesale and retail customers.

Through 1989, our energy-saving programs reduced the need for new generating capacity by 193 megawatts. In the next 20 years, our long-range plan calls for the C&LM contribution to grow to approximately 1,400 megawatts—nearly one-third of the new generating capacity we would otherwise require.

In 1989, to make conservation a viable business strategy, NEES' retail subsidiaries in conjunction with



In 1989, we expanded time-of-use rates. A special meter measures the customer's use of electricity during peak and off-peak hours. A price difference encourages the shift of usage to off-peak periods.

the Conservation Law Foundation requested regulatory approval to earn a profit on successful energy-saving measures. In December, we received precedent-setting approval of our 1990 program from the Rhode Island Public Utilities Commission. Our proposal is also under consideration by the commissions in Massachusetts and New Hampshire. We are excited about the potential of the profit incentive for achieving energy conservation and improving your earnings in the years ahead.

Environment

Concerns about acid rain, aesthetics, global warming and the health effects of electromagnetic fields will continue to temper public acceptance of electricity generation and transmission. NEES' response is to comply quickly and efficiently with evolving environmental and energy legislation, and to look for cost-effective ways of doing even better than the requirements. In the mid-1980s, we achieved both of these goals in our highly successful program to convert six oil-fired units to coal, providing significant fuel cost savings for customers while

reducing sulfur dioxide and particulate emissions.

Among 1989 initiatives, we began to explore ways to consider environmental costs of new projects as part of the least-cost planning process required by our regulators; identified new sources of low-sulfur coal for our power plants; and signed a contract with a private firm that will accept coal ash produced at our Salem Harbor generating station for commercial use in cement. We also continued our phase-out of PCBs (polychlorinated biphenyls) in electrical equipment, ahead of requirements.

We are expanding our use in power plants of natural gas—a fuel that emits no sulfur dioxide and substantially less carbon dioxide than other fossil fuels. In 1989, we filed for permits to triple the generating capacity of our Manchester Street Station in Rhode Island, using natural gas as its primary fuel. Brayton Point Unit 4 in Massachusetts is targeted for conversion from oil to natural gas. Both projects are scheduled to be completed by the mid-1990s. Although adequate pipeline capacity for natural gas



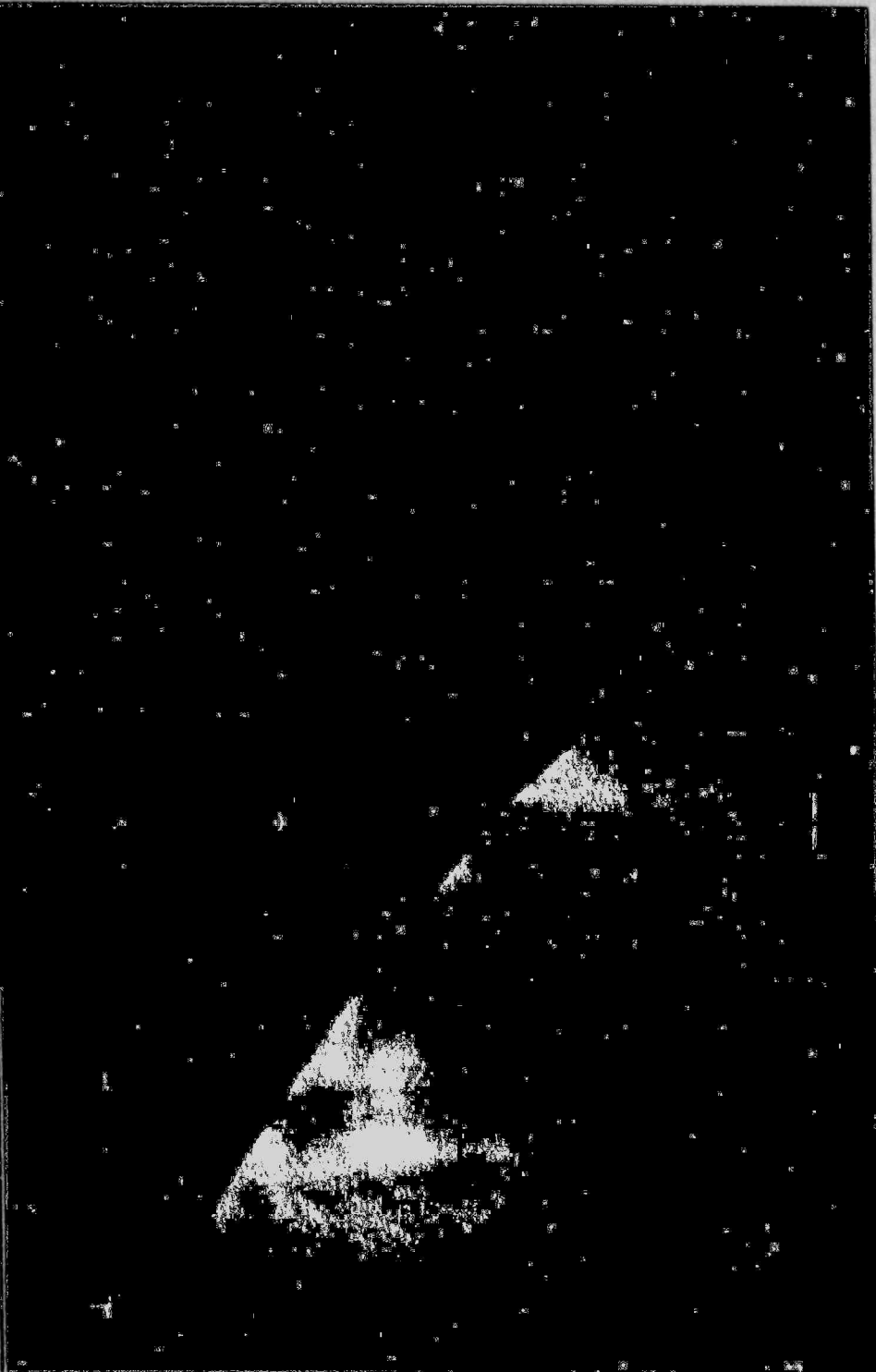
Silos store coal ash at two of our generating stations. We have been successful at finding new markets and uses for this by-product of coal combustion, including as an ingredient in cement.

E N V I R O N M E N T



As part of our large-scale coal conversion project in the 1980s, we not only reduced our use of oil but also lowered stack emissions of sulfur dioxide and particulates. Pictured above is the coal conveyor and exterior of our Brayton Point Station.

R E S O U R C E S



A non-union healthy under contract
to a NREB company uses methane
gas from landfill trash to generate
electricity, and burns off any
excess methane gas to protect the
environment.

remains a concern for the entire region, we are hard at work to assure that supplies of this fuel will be available to meet our needs.

Diversity of resources

For decades, NEES has recognized the importance of obtaining energy from a variety of fuels and sources. In 1989, our energy mix was 27 percent oil, 44 percent coal, 17 percent nuclear, 11 percent hydro and alternates, and one percent natural gas. Increased use of natural gas will enhance the balance of our mix, supplying approximately 25 percent by the year 2000.

Our fossil-fueled plants in Massachusetts and Rhode Island are the backbone of our power supply system. Since its inception two years ago, our "Thermal Initiatives" program has helped to improve the availability of our fossil-fueled generating units by more than six percent. The units' 1989 availability record was their best in more than 15 years.

Our hydroelectric operations—the largest in New England in terms of capacity and kilowatthours

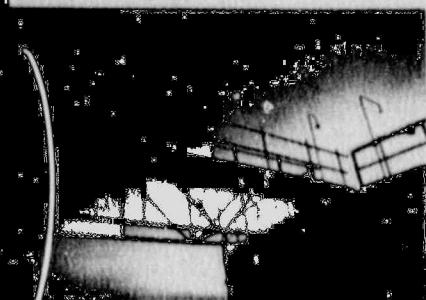
generated—played a vital role in helping us meet peak demands for electricity at relatively low cost.

In response to federal and state laws, we are supplementing our own generating resources through one of the region's most aggressive and successful utility programs to obtain capacity from non-utility sources. Our 1988 Request for Power Supply Proposals garnered a higher response than any in the region; in 1989 we were able to select and contract for 205 megawatts from more than 4,700 megawatts of proposals.

In total, 302 megawatts of non-utility capacity are in service; another 808 megawatts are under contract and targeted to come on line by 1993. By the late 1990s, we are planning for approximately 20 percent of the NEES companies' generating capacity to be supplied by non-utility sources from throughout New England. To allow full use of such resources, we are determined to ensure open access to the region's transmission facilities and will continue to press that position with regulatory agencies and neighboring utilities.



A generator at our Bellows Falls Station in Vermont is one of 46 conventional hydro and pumped storage generators we can call upon during periods of high customer demand for electricity.



Repowering our Manchester Street Station, a facility that dates back to the early 1900s, is a cost-effective way to provide new capacity on an existing site. Pictured above is a catwalk at the plant's fuel storage area.

Value

Our search for greater customer value extends beyond price to such achievements as our high level of reliability, the diversity of conservation services we provide and our track record of quick responses to power outages and customer inquiries.

Among 1989 initiatives to improve service, we reduced the response time to customer phone calls by 18 percent, answering the average call before the third ring; installed equipment at our local offices that allows immediate recording of customer bill payments on our mainframe computer in Westborough, Massachusetts; and expanded employee training in customer satisfaction skills. In satisfaction surveys, we have consistently been above the 85 percent level during the past three years.

We will continue to listen to customers and to design programs and services to meet their needs. When appropriate, we will seek permission to improve earnings based on value of service to customers.

We seek to be progressive in thinking, but conservative with money. This approach helped us to rebuild earnings during 1989. Among austerity measures introduced during

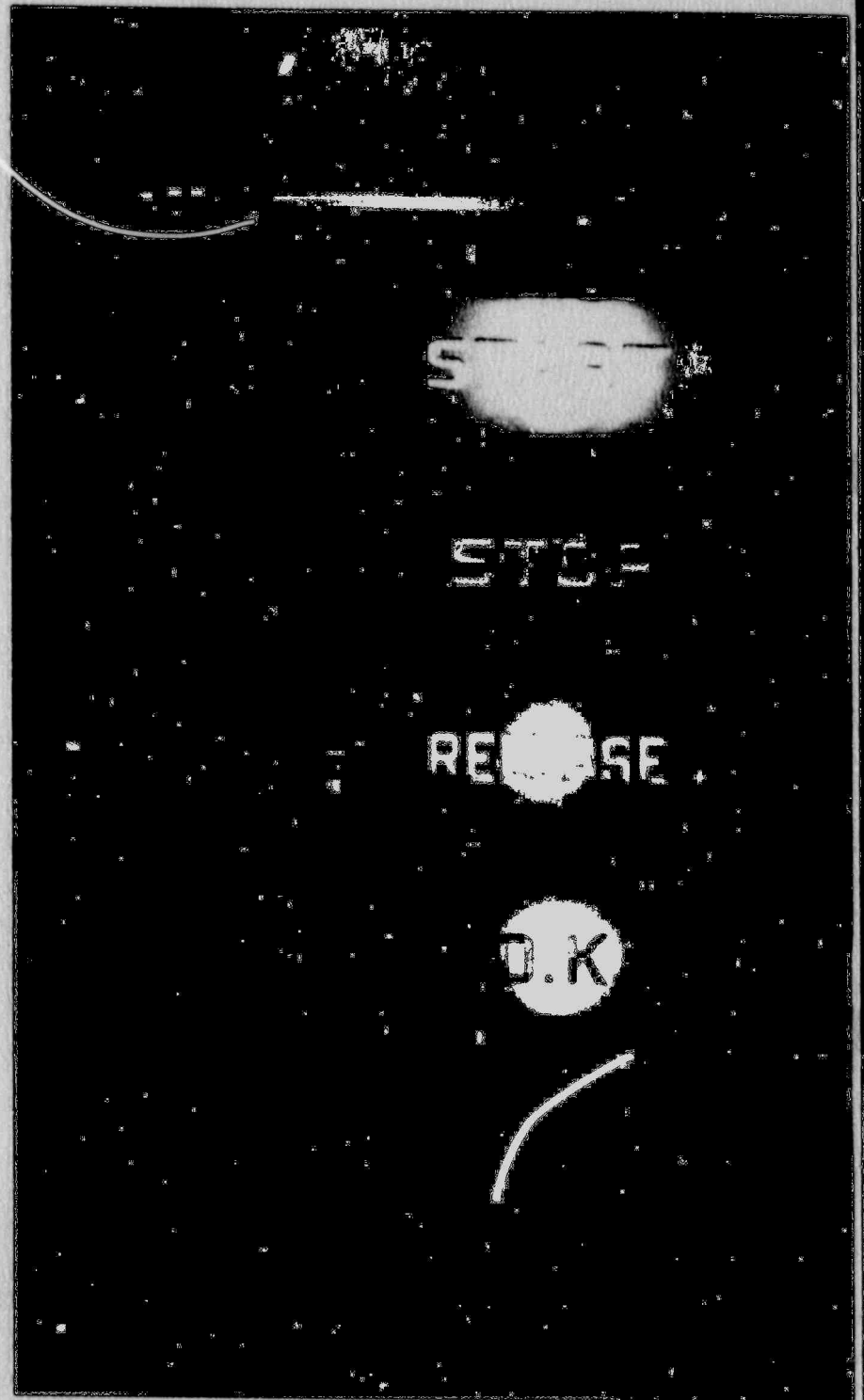
the year were a partial hiring freeze, internal cost cutting, and caps on salary increases and non-emergency overtime. Other actions contributing to the rebuilding of earnings included the settlement of a pending arbitration case and the sale of our 51 percent share of the coal transport ship *Energy Independence* (see pages 12 and 31).

NEES' constant commitment to earnings has helped build a solid, long-term record in value for shareholders. With dividends reinvested, each dollar invested in NEES common shares 15 years ago was worth \$16.97 on December 31, 1989, compared with a \$12.24 average of other New England/New York electric utilities.

Enhanced financial performance will be a priority in the 1990s. To help us achieve this goal, we will continue to direct investments to basic electric utility services and projects where we have a competitive edge, to keep risks commensurate with returns and to develop new ways of earning on our service.

We are striving to be the best electric utility investment in the Northeast, based on market value of common shares and reinvested earnings.

V A L U E



Hydro station's indicator panel symbolizes a key advantage of our extensive hydroelectric system: flexibility to provide supplementary supplies of electricity quickly, reliably and at relatively low cost.

Overview

Earnings were \$2.36 per average share in 1989 compared with a loss of \$.94 in 1988 and earnings of \$3.09 in 1987. Earnings in 1988 were \$2.20 excluding the 1988 rate settlement write-down discussed below. The earned return on average common equity in 1989 was 12.6 percent. The dividend rate remained at \$2.04 per share on an annual basis. The market price of New England Electric System (NEES) common shares at year end 1989 was \$28³/₄ a share compared with \$24 at the end of 1988.

Growth in kilowatthour sales to ultimate customers slowed to 2.7 percent in 1989, significantly lower than the five percent average annual rate experienced by the System over the previous five years. The reduced level of growth reflects a slowdown in the economy and a return to typical summer temperatures, following the extremely hot summer of 1988. Current economic forecasts for our service area portray continued economic slowdown for 1990, with a further reduction in kilowatthour sales growth.

During 1989, additional purchases of power were necessary to maintain capacity reserve requirements. During the early 1990s, we will continue to make short-term purchases of capacity, to the extent available, and we expect our expanded efforts in conservation and load management (C&LM) to make a significant contribution. In 1989, we spent a total of \$41 million on C&LM and expect to spend \$65 million in 1990. We will share in the output of several new projects. The first unit of the Ocean State Power project is scheduled to go into service in 1990 and the second in 1991. The Seabrook 1 nuclear unit (Seabrook 1) is also completed and awaits receipt of an operating license. In addition, the second phase of the interconnection between the Hydro-Quebec system and the New England region is scheduled to begin operation in late 1990. After the early 1990s, increased demand is expected to be met by our C&LM programs, our own generating projects, purchased power and non-utility generation.

In December, we sold our 51 percent interest in the joint venture, that owned and operated a coal-carrying ship, to our partner, as part of a settlement of a pending arbitration of the ship's charter hire rate. The ship will continue to carry coal to our generating stations under a new long-term contract. The settlement resulted in a nonrecurring gain in 1989 earnings of 16 cents per average share due to the reversal of previously accrued litigation reserves and tax benefits.

The decline in earnings from 1987 to 1988 was principally due to the ongoing impacts of the 1988 rate settlement, including our wholesale subsidiary, New England Power Company (NEP), no longer recording allowance for funds used during construction (AFDC) on Seabrook 1 and the amortization of our Seabrook 1 investment net of the write-down. Other factors contributing to the decrease were increased maintenance, purchased power and C&LM costs.

In November, we withdrew our \$2 billion offer to acquire Public Service Company of New Hampshire (PSNH). We concluded that the price being offered for PSNH by other bidders and the rate levels necessary to support the price would not be in the best interest of our shareholders and would interfere with our ability to provide low rates to our customers.

In December, we reached a settlement of a rate case in Rhode Island that includes an opportunity to earn an incentive based on the results of our C&LM program in 1990. In February 1990, we reached a settlement, subject to Federal Energy Regulatory Commission (FERC) approval, on our 1989 wholesale rate case. We also have a rate case pending in Massachusetts.

During November, we sold four million new common shares. The proceeds from the sale are principally being used to finance our subsidiaries' construction programs. Because we sold the shares at more than \$7 per share above book value, the sale increased the book value of all our shares by approximately 45 cents per share.

Seabrook 1 nuclear unit

NEP owns approximately 10 percent of Seabrook 1. As part of NEP's 1988 rate settlement, all issues associated with NEP's investment in Seabrook 1 through December 31, 1987 were resolved.

Construction of Seabrook 1 was completed in 1986, but the unit cannot enter commercial operation until an unconditional operating license is issued by the Nuclear Regulatory Commission (NRC). Low-power testing of Seabrook 1 was conducted in May and June 1989.

The general safety of nuclear generating operations, the effectiveness of Seabrook 1 emergency response plans and the safety of Seabrook 1 have been the subjects of intensive public controversy in Massachusetts and New Hampshire. A number of parties, including elected federal, state and local officials, are opposed to operation of the plant and approval of emergency response plans.

Although there is still no assurance that Seabrook 1 will enter commercial operation, the likelihood has increased. The NRC is scheduled to decide in early March whether to issue a full-power license for the plant. However, the Massachusetts Attorney General has indicated that he will appeal any decision that is favorable to the project. It is not clear whether such an appeal would cause further delay in commercial operation.

1988 Rate settlement

In the second quarter of 1988, NEP reached a rate settlement agreement which resulted in a \$179 million after-tax write-down (\$260 million before tax). The settlement resolved issues associated with the recovery of our pre-1988 Seabrook 1 investment and our investment in oil and gas properties. It also resolved all other rate issues outstanding at that time.

As discussed in Note C, the write-down related to Seabrook 1 and assumed that the unit would be cancelled. Therefore, if the unit is ultimately cancelled, no further write-down of our pre-1988 investment would be required. However, if Seabrook 1 enters commercial operation and NEP is satisfied that various other conditions have been met, it will be able to reverse a portion of the write-down. The impact, assuming no power output level restrictions in the operating license, would be to increase net income by approximately \$115 million after tax.

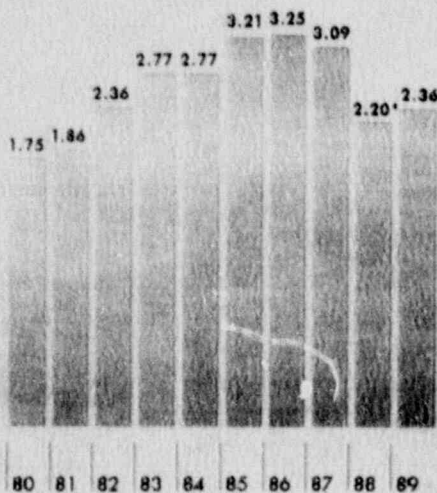
The settlement allows NEP to recover through its fuel clause its payments to its affiliate, New England Energy Incorporated (NEEI), for costs resulting from NEEI's oil and gas exploration and development activities undertaken from 1974 through 1983 (rate regulated program).

Recovery of Seabrook 1 costs incurred after January 1, 1988 is subject to FERC approval. (See Note D-1.) The prudence of certain NEEI costs incurred subsequent to March 1, 1988 could be subject to FERC review. (See Note A-6.)

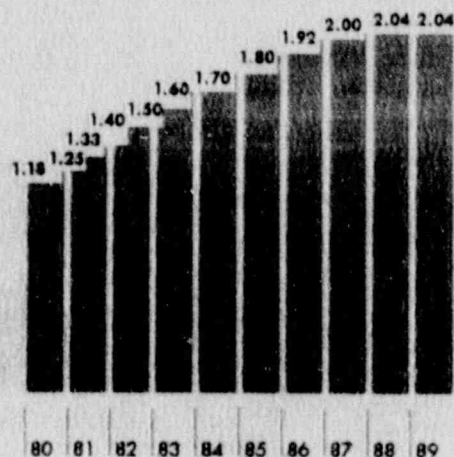
Wholesale rate activity

In August 1989, NEP filed its W-11 rate case with the FERC, which was composed of two parts. In February 1990, NEP reached a settlement with various parties on the first part, which, if approved by the FERC, will allow NEP to increase its rates by \$39.4 million on an annual basis effective March 1, 1990. The settlement also provides that in the event actual 1990 sales vary from the estimated levels reflected in the filing, NEP will recover or refund the variance, up to \$17.4 million.

Earnings Per Average Share (\$)



Dividends Declared Per Share
—Annual Rate (\$)



* Before write-down. A loss of \$.94 after write-down.

The second part, amounting to \$22 million, covers operating costs. The second part was approved by the FERC without prejudice to its requirement that NEP receive a full-power operating license.

In addition, the FERC also allowed NEP's proposed \$55 million C&LM surcharge for 1990 C&LM expenditures to become effective January 1, 1990, subject to refund. However, to the extent the states which regulate our retail subsidiaries allow recovery of these costs, NEP will reduce or eliminate this surcharge. (See Retail rate activity section.)

The FERC approved a partial settlement of NEP's W-10 wholesale rate case which increased rates by \$40.2 million on an annual basis effective May 1, 1989. In addition, the settlement allowed NEP to capitalize and recover with a return, over two years, 1989 C&LM costs of \$30 million. The only unresolved issue relates to approximately \$9 million of purchased power costs resulting from the New England Power Pool's Performance Incentive Program. In October 1989, an administrative law judge (ALJ) issued an initial decision allowing full recovery of these costs. The ALJ decision is subject to final FERC approval.

In August 1989, NEP implemented a new seasonal rate design under which it bills customers at higher rates during high-demand months and lower rates in low-demand months. The new rate design was not intended to have a significant impact on total revenues over any 12-month period. However, primarily due to high peak-demand levels, this new rate design increased NEP's billings in 1989. Our retail companies in Massachusetts and Rhode Island received regulatory permission in December 1989 to recover the increased NEP billings from their customers, which increased consolidated revenues by \$6 million. These new seasonal rates could have either a positive or negative effect on 1990 revenues depending on actual customer usage.

The W-10 settlement also approved NEP's request, effective May 1, 1989, for a modification to the Oil Conservation Adjustment (OCA) charge, a rate through which NEP is recovering its Salem Harbor Station coal conversion costs. Due to a reduction in the coal-oil price differentials used in calculating the OCA charge, NEP requested that a minimum rate be established.

Effective January 1, 1988, NEP reduced its rates by \$21.5 million. The decrease included the effect of the lower federal income tax rate.

In December 1987, NEP provided for and has since made refunds to customers to reflect the FERC's decision that NEP's full investment in the cancelled Seabrook 2 unit should be recovered over 10 years, without a return on the unamortized balance, rather than the shorter period requested by NEP.

Retail rate activity

In December 1989, the Rhode Island Public Utilities Commission (RIPUC) approved an agreement that allows our subsidiary, Narragansett Electric (Narragansett), to recover currently its 1990 C&LM program expenditures of approximately \$11 million and provides an opportunity to earn an incentive based on the results of the 1990 program. We have similar proposals pending in Massachusetts and New Hampshire.

The RIPUC also approved a settlement of Narragansett's general rate increase request which increased rates by \$5.8 million effective January 1, 1990. In addition, certain discounts offered by Narragansett, amounting to approximately \$4.5 million on an annual basis, terminated on January 1, 1990.

In February 1989, Narragansett reduced its rates by \$3.3 million as part of a rate settlement agreement negotiated in 1988. As part of the settlement, Narragansett also wrote off, in December 1988, the accumulated deficit of \$2.5 million in its Storm Contingency Fund.

In September 1989, Massachusetts Electric filed a petition for a \$51.8 million rate increase with the Massachusetts Department of Public Utilities (MDPU). If approved by the MDPU, new rates would become effective in April 1990.

The System's retail electric subsidiaries reduced their rates in July 1987, primarily to reflect the impact of the new tax law and savings in other costs. Massachusetts Electric reduced its rates by \$16.8 million, Narragansett by \$3.6 million and Granite State Electric by \$500,000. In addition, Granite State Electric agreed to a further rate reduction of \$500,000 effective January 1, 1988.

**Hydro-Quebec
Phase 2**

Two new subsidiaries, New England Hydro-Transmission Electric Company, Inc. and New England Hydro-Transmission Corporation (Hydro-Transmission companies), were formed to build, own and operate the Phase 2 transmission interconnection between the Hydro-Quebec system and New England.

Although NEES owns only 50.4 percent of the outstanding common stock of the Hydro-Transmission companies, they have been fully consolidated in the financial statements. Interest expense on long-term debt of these companies has no impact on net income, since all interest expense is capitalized as debt AFDC. The consolidated income statement for 1989 included \$12.8 million of debt AFDC and \$10.5 million of equity AFDC related to the Hydro-Transmission companies. The "Minority interests, principally AFDC" line represents the minority interests' portion of the net earnings of the Hydro-Transmission companies. See Note A-1 for a further discussion of the minority interests' portion of the project.

**Operating
revenue**

Operating revenue increased by \$124 million in 1989 compared with 1988 due to a 2.7 percent increase in kilowatt-hour sales to ultimate customers and the effects of a May 1989 NEP rate increase.

In 1988, operating revenue increased by \$71 million over 1987 due principally to a 5.9 percent increase in kilowatt-hour sales to ultimate customers.

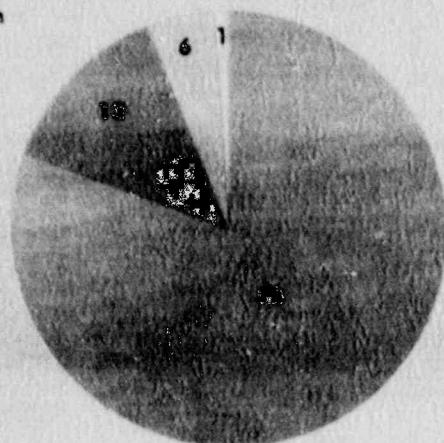
**Operating
expenses**

Total operating expenses increased by \$103 million in 1989. The non-fuel component of purchased electric energy increased by \$45 million due to increased capacity purchases to meet the continued high peak-demand levels. The System has experienced peak loads over the past few years which were higher than expected. Increased purchased power expense and C&LM costs comprised the two major components of NEP's May 1989 rate increase. Other operation and maintenance expense increased by \$11 million due to increased transmission costs associated with additional purchases of power, increased uncollectible accounts expense and general inflationary increases in other areas. Partially offsetting these increases is a reduction in C&LM costs resulting from NEP capitalizing and recovering the 1989 C&LM costs, over a two-year period with a return, as part of a rate case settlement. Depreciation and amortization expense increased in 1989, reflecting increased OCA amortization, new construction expenditures, and the amortization of a portion of Seabrook 1 costs as part of the 1988 rate settlement.

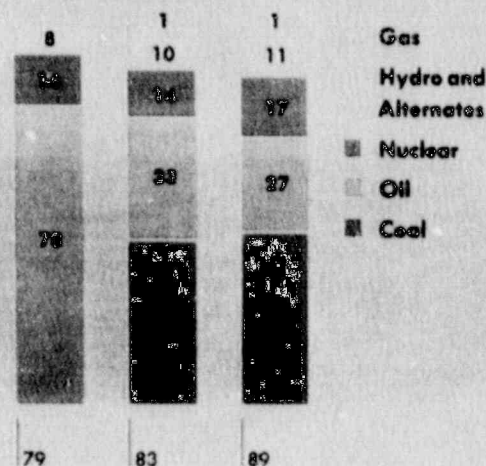
In 1988, total operating expenses increased by \$78 million. The non-fuel component of purchased electric energy increased by \$19 million due to additional purchases of capacity required to meet the high peak-demand levels. Other operation and maintenance cost increases include increased C&LM

Regulation—Percent of 1989 Electric Revenue

- Federal Energy Regulatory Commission
- Massachusetts
- Rhode Island
- New Hampshire



NEES Energy Mix (%)



expenses and costs associated with overhauls of system thermal generating units. Depreciation and amortization expense increased as a result of the start of the amortization of Seabrook 1 under the 1988 rate settlement. This increase also reflects a retroactive adjustment recorded in December 1987 to reflect a FERC decision which changed the recovery period for the Seabrook 2 property loss from 5 to 10 years. Amortization of oil and gas properties was also increased due to greater production.

NEES and its utility subsidiaries have been contacted by federal and state environmental agencies regarding the cleanup of sites designated as containing hazardous waste. While the cost to clean up these sites cannot be estimated, it is believed at this time that such costs will not be material to the System's financial position. (See Note D-10.)

Currently, NEES records post-retirement benefit costs other than pensions, principally health care costs, when paid. New accounting rules are currently being proposed for such costs which would require employers such as NEES to establish a liability for the expected cost of providing post-retirement benefits to employees, during the working years of the employees. This proposal, if adopted in its present form, is expected to result in a significant increase in annual expense which the System companies would seek to recover through rate increases.

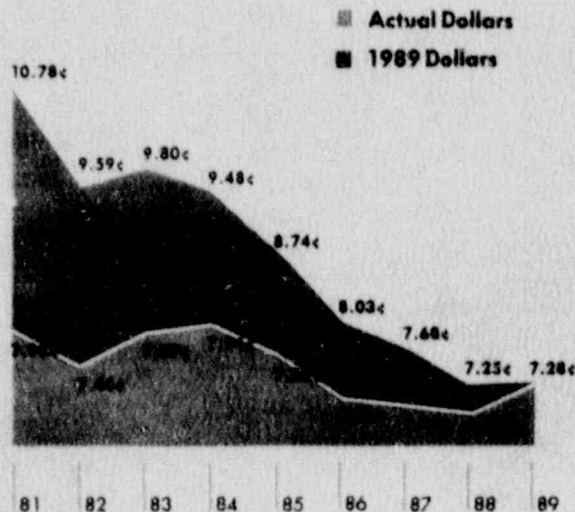
Taxes

The Tax Reform Act of 1986 reduced the corporate federal income tax rate from 46 percent to an average rate of 40 percent in 1987 and 34 percent thereafter. This reduction in the tax rate contributed to the decrease in federal income tax expense between 1987 and 1988. The benefits of the new tax law are being passed on to customers through rate reductions and therefore have no significant impact on net income.

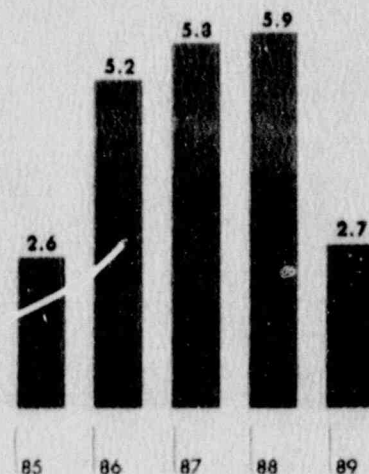
New accounting rules issued by the Financial Accounting Standards Board, which are expected to become effective in 1992, will require all deferred tax balances to be restated at the 34 percent rate or the rate in effect at that time, if different, and will require any excess to be reclassified from a deferred tax liability account to a customer-related liability account. It is expected that, through the regulatory process, excess reserves for deferred taxes will be passed back to rate payers with no significant impact on net income. The pass-back of such excess deferred tax reserves commenced in 1987, which also contributed to the decrease in federal income tax expense in 1989 and 1988.

For a discussion of tax issues in dispute see Notes D-6 and D-7.

Cost Per KWH to Ultimate Customers (¢)



Kilowatt-hour Sales Growth to Ultimate Customers (%)



Allowance for funds used during construction

AFDC increased in 1989 due to increased construction work in progress principally associated with the Hydro-Quebec Phase 2 project. (See Hydro-Quebec Phase 2 section.)

The significant decrease in AFDC in 1988 was principally the result of NEP no longer recording AFDC on the pre-1988 Seabrook 1 investment, due to the 1988 rate settlement. In addition, in the second quarter of 1987, NEP recorded additional AFDC of \$8 million, retroactive to April 1984, on certain costs reallocated from the cancelled Seabrook 2 to Seabrook 1.

Oil and gas operations

NEEI participates in domestic oil and gas exploration, development and production, in both a rate regulated and a non-rate regulated program.

NEEI has incurred operating losses since 1986 on the rate regulated program, due to precipitate declines in oil and gas prices. These losses are passed on to NEP under an intercompany pricing policy approved by the Securities and Exchange Commission. NEP's ability to pass such losses on to its customers was favorably resolved in its 1988 rate settlement. Certain rate regulated program costs incurred subsequent to March 1, 1988 could be subject to a prudence review. (See Note A-6.)

Profits or losses on prospects entered into since December 31, 1983 (non-rate regulated program) are borne by shareholders. During the year 1989, the System recorded an after-tax loss from NEEI's non-rate regulated program of \$3.6 million. In 1988, the System recorded an after-tax profit of \$0.1 million and in 1987 an after-tax loss of \$0.8 million.

Although NEEI will continue to incur costs in connection with activities related to existing prospects, it stopped acquiring new oil or gas prospects after December 31, 1986.

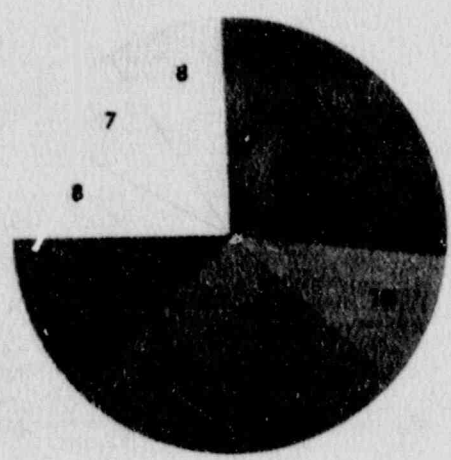
1989 Capital expenditures and financing

Cash construction expenditures for NEP and the retail electric subsidiaries totaled \$277 million. These expenditures included approximately \$65 million associated with improvements, completed in 1989, to NEP's transmission facilities in connection with the Hydro-Quebec Phase 2 project. Internally generated funds, and issues of long-term debt and NEEI common shares provided the funds necessary for construction expenditures during the period.

Cash construction expenditures by the Hydro-Transmission companies totaled \$254 million, including \$176 million for reimbursement plus interest to participating utilities, including NEP, of preliminary project costs incurred prior to 1989. These expenditures were financed by long-term borrowings (60 percent) and common equity contributions (40 percent).

Where Each Dollar of 1989 Revenue Went (%)

- Fuel
- Purchased Power (excl. fuel)
- Other O & M
- Depreciation and Amortization
- Taxes
- Interest and Preferred Dividends
- Earnings—Common Shares



System Maximum Demand and Capability (Megawatts)

Year	System Maximum Demand	Reserve	System Maximum Capability
1985	4307	21%	3553
1986	4342	29%	3520
1987	4921	30%	3798
1988	5268	28%	4124
1989	5480	30%	4225

Oil and gas exploration and development expenditures by NEEI totaled \$54 million, including capitalized interest costs of \$33 million. Internally generated cash provided all of the funds necessary for these expenditures.

In May 1989, NEEI refinanced its outstanding borrowings through a new credit agreement which provides for borrowings of up to \$400 million and NEP issued \$17 million of pollution control revenue bonds. In addition, Massachusetts Electric issued \$50 million of first mortgage bond during August 1989.

NEES sold four million new common shares in November 1989. The proceeds from the sale (approximately \$105 million) are principally being used to finance a portion of the construction programs of NEES subsidiary companies. In addition, NEES raised \$34 million of equity during 1989 through the issuance of new common shares under the System's dividend reinvestment and common share purchase plan and employee share plans.

1990 Capital expenditures and financing

Cash construction expenditures for NEP and the retail electric subsidiaries are estimated to be \$235 million in 1990. Internally generated funds are estimated to meet approximately 80 percent of construction expenditures in 1990.

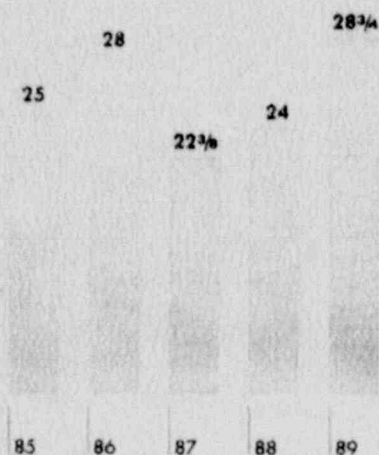
The mortgage indentures and note agreements of the retail electric subsidiaries contain restrictions on the issuance of long-term debt that require earnings before interest and taxes for 12 consecutive calendar months within the preceding 15 to be at least twice the annual interest charges on all long-term debt outstanding. During the first part of 1990, operation of this restriction will prevent one or more of these subsidiaries from issuing new long-term debt. As discussed in the Retail rate activity section, the retail electric subsidiaries in Massachusetts and Rhode Island have either received or have pending rate increases which are expected to alleviate this situation. Subject to the above restrictions, the retail electric subsidiaries plan to issue \$80 million of long-term debt in 1990 or early 1991.

Cash construction expenditures by the Hydro-Transmission companies are estimated to be \$55 million in 1990. The Hydro-Quebec Phase 2 transmission interconnection is scheduled to begin operation in late 1990. Long-term borrowings are expected to finance 60 percent of these expenditures.

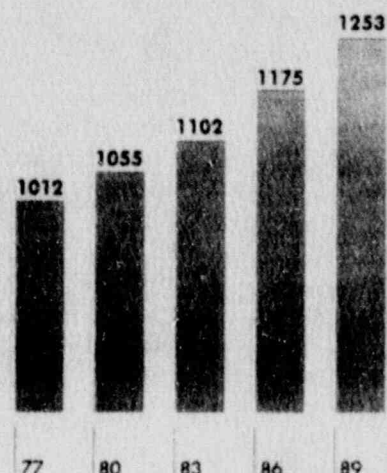
In 1990, expenditures for oil and gas activities are estimated to be \$50 million, including capitalized interest costs of \$30 million. Internal funds are estimated to provide all of these needs in 1990.

NEES expects to raise about \$35 million of equity during 1990 through the issuance of new common shares under the System's dividend reinvestment and common share purchase plan and employee share plans.

Market Price Per Share —Year End (\$)



Number of Customers (Thousands)



New England Electric System and Subsidiaries

Selected Financial Data

	1989	1988	1987	1986	1985
Operating revenue:					
Electric sales (excluding fuel cost recovery)	\$1,084	\$ 996	\$ 942	\$ 940	\$ 908
Fuel cost recovery	458	428	432	407	462
Other utility revenue	42	37	28	29	25
Oil and gas sales	59	59	46	56	49
Total operating revenue	\$1,643	\$1,520	\$1,448	\$1,432	\$1,444
Net income (loss)	\$ 139	\$ (54)*	\$ 171	\$ 175	\$ 167
Average common shares	58,836,246	57,026,739	55,377,967	53,794,323	52,083,490
Return on average common equity	12.6%	11.2%**	14.9%	12.8%	17.9%
Per share data:					
Net income (loss)	\$ 2.36	\$ (1.04)*	\$ 3.09	\$ 3.25	\$ 3.21
Dividends declared	\$ 2.04	\$ 2.04	\$ 2.01	\$ 1.94	\$ 1.83
Total assets	\$4,116	\$3,718	\$3,970	\$3,788	\$3,659
Capitalization:					
Common share equity and minority interests†	\$1,268	\$1,056	\$1,191	\$1,090	\$ 979
Cumulative preferred stock	162	162	162	187	205
Long-term debt	1,689	1,434	1,387	1,401	1,364
Total capitalization	\$3,067	\$2,652	\$2,740	\$2,678	\$2,548
Total electric sales (millions of kilowatthours)	21,394	20,771	19,741	19,574	18,338
Cost per KWH to ultimate customers (cents)	7.28	6.92	7.04	7.10	7.58
System maximum demand (megawatts)	4,225	4,124	3,798	3,520	3,555
Electric capability (MW net)—year end	5,480	5,268	4,921	4,542	4,307
Number of employees	5,580	5,478	5,256	5,131	5,004
Number of customers	1,253,425	1,233,519	1,204,189	1,175,307	1,147,399

* Includes the effect of a rate settlement write-down recorded in the second quarter of 1988. The write-down amounted to \$179 million after tax or \$3.14 per share. (See Note C.)

** Return on average common equity in 1988 is calculated using the \$2.20 earnings per average share, which excludes the 1988 rate settlement write-down.

† Includes minority interests in consolidated subsidiaries of \$54 million in 1989.

New England Electric System and Subsidiaries
Statement of Consolidated Income (Loss)

	1989	1988	1987
Operating revenue	\$1,643,199	\$1,519,677	\$1,448,193
Operating expenses:			
Fuel for generation	295,132	286,649	316,775
Purchased electric energy:			
Fossil and interchange	200,503	157,132	104,711
Nuclear entitlements	104,989	100,305	100,258
Other operation	289,532	279,890	246,660
Maintenance	121,582	120,497	101,250
Depreciation and amortization	256,881	229,060	178,918
Taxes, other than federal income	97,714	93,615	91,316
Federal income taxes	34,728	30,945	80,227
Total operating expenses	1,401,061	1,298,093	1,220,115
Operating income	242,138	221,584	228,078
Other income:			
Allowance for equity funds used during construction	12,231	1,969	25,318
Minority interests, principally AFAC	(5,491)		
Equity in income of investee power companies	4,108	5,769	6,616
Other income (expense)—net	(584)	851	4,969
Rate settlement write-down (Note C)		(260,213)	
Federal and state taxes on rate settlement write-down (Note C)		81,217	
Operating and other income	254,632	51,177	264,981
Interest:			
Interest on long-term debt	110,535	88,988	87,273
Other interest	12,340	7,583	9,763
Allowance for borrowed funds used during construction	(17,465)	(2,146)	(15,575)
Total interest	105,410	94,425	81,461
Income (loss) after interest	149,222	(43,248)	183,520
Preferred dividends of subsidiaries	10,572	10,572	12,314
Net income (loss) (Note C)	\$ 138,650	\$ (53,820)	\$ 171,206
Average common shares	58,836,246	57,026,739	55,377,967
Per share data:			
Net income (loss)	\$ 2.36	\$ (.94)	\$ 3.09
Dividends declared	\$ 2.04	\$ 2.04	\$ 2.01

The accompanying notes are an integral part of these financial statements.

New England Electric System and Subsidiaries Consolidated Balance Sheets

		1989	1988	
Assets	Utility plant, at original cost	\$3,651,430	\$3,427,675	
	Less accumulated provisions for depreciation and amortization	1,149,032	1,072,045	
		<u>2,502,398</u>	<u>2,355,630</u>	
	Construction work in progress (Note D)	376,426	77,549	
	Net investment in Seabrook 1 under rate settlement (Notes C and D)	194,303	228,133	
	Net utility plant	<u>3,073,127</u>	<u>2,661,312</u>	
	Oil and gas properties, at full cost	1,157,848	1,103,756	
	Less accumulated provision for amortization	591,309	497,610	
	Net oil and gas properties	<u>566,539</u>	<u>606,146</u>	
	Investments:			
	Nuclear power companies, at equity	46,091	45,377	
	Other subsidiaries, at equity	18,887	25,356	
	Other investments, at cost	18,004	18,754	
	Total investments	<u>82,982</u>	<u>89,487</u>	
	Current assets:			
	Cash, including temporary cash investments of \$9,700 and \$7,300	11,990	30,724	
	Accounts receivable, less reserves	204,492	192,203	
	Fuel, materials and supplies, at average cost	73,890	66,755	
	Other current assets	6,628	6,808	
	Total current assets	<u>296,900</u>	<u>276,570</u>	
	Unamortized property losses (Note F)	32,874	42,150	
	Deferred charges and other assets	64,837	42,307	
	<u>\$4,116,359</u>	<u>\$3,717,972</u>		
Capitalization and liabilities	Capitalization (see accompanying statements):			
	Common share equity	\$1,211,638	\$1,055,879	
	Minority interests in consolidated subsidiaries	54,230		
	Cumulative preferred stock	162,528	162,528	
	Long-term debt	1,638,495	1,433,680	
	Total capitalization	<u>3,066,891</u>	<u>2,652,087</u>	
	Current liabilities:			
	Accounts payable	135,992	156,083	
	Accrued taxes	3,357	900	
	Accrued interest	29,224	22,471	
	Dividends declared	33,864	30,618	
	Other current liabilities	44,821	47,997	
	Total current liabilities	<u>287,758</u>	<u>358,069</u>	
	Deferred federal and state income taxes	538,456	574,328	
	Unamortized deferred charges	132,528	132,528	
Other non-current liabilities (Note G)	172,429	172,429		
Total non-current liabilities	<u>843,413</u>	<u>879,285</u>		
	<u>\$4,116,359</u>	<u>\$3,717,972</u>		

The accompanying notes are an integral part of these financial statements.

New England Electric System and Subsidiaries Statements of Consolidated Retained Earnings

	1989	1988	1987
Retained earnings at beginning of year	\$ 443,798	\$ 614,066	\$ 556,695
Net income (loss)	138,650	(53,820)	171,206
Dividends declared on common shares	(121,406)	(116,448)	(111,390)
Premium on reacquisition of preferred stock			(2,445)
Retained earnings at end of year	<u>\$ 461,042</u>	<u>\$ 443,798</u>	<u>\$ 614,066</u>

At December 31 (thousands of dollars)

	1989	1988
Common share equity		
Common shares, par value \$1 per share		
Authorized—150,000,000 shares		
Outstanding—62,977,530 and 57,812,128 shares	\$ 62,978	\$ 57,596
Paid-in capital	687,618	554,485
Retained earnings	461,042	443,798
Total common share equity	<u>\$1,211,638</u>	<u>\$1,055,879</u>

Cumulative preferred stock of subsidiaries

Company	Par value	Shares outstanding		1989	1988
		1989	1988		
Massachusetts Electric Company					
4.44% Series	100	75,000	75,000	\$ 7,500	\$ 7,500
4.76% Series	100	75,000	75,000	7,500	7,500
7.80% Series	100	150,000	150,000	15,000	15,000
7.84% Series	100	200,000	200,000	20,000	20,000
The Narragansett Electric Company					
4½% Series	50	180,000	180,000	9,000	9,000
4.64% Series	50	150,000	150,000	7,500	7,500
8.00% Series	50	200,000	200,000	10,000	10,000
New England Power Company					
6.00%	100	80,140	80,140	8,014	8,014
4.56% Series	100	100,000	100,000	10,000	10,000
4.60% Series	100	80,140	80,140	8,014	8,014
4.64% Series	100	100,000	100,000	10,000	10,000
6.08% Series	100	100,000	100,000	10,000	10,000
7.24% Series	100	150,000	150,000	15,000	15,000
8.40% Series	100	150,000	150,000	15,000	15,000
8.68% Series	100	100,000	100,000	10,000	10,000
Total cumulative preferred stock of subsidiaries (annual dividend requirement of \$16,572 for 1989 and 1988)		<u>1,890,280</u>	<u>1,890,280</u>	<u>\$162,528</u>	<u>\$162,528</u>

	Granite State Electric Company		12.50%	2000	4,000	4,000
	New England Energy Incorporated		variable	1998	319,000	345,000
	New England Hydro-Transmission Corporation		variable	1998	69,499	
	New England Hydro-Transmission Electric Company, Inc.		variable	1998	95,541	
First mortgage bonds	Massachusetts Electric Company	Series F	5%	1991	17,490	17,490
		Series G	4 ³ / ₈ %	1992	60,000	60,000
		Series H	4 ⁵ / ₈ %	1993	10,000	10,000
		Series I	5 ³ / ₄ %	1996	10,000	10,000
		Series J	7 ¹ / ₈ %	1998	15,000	15,000
		Series K	7 ⁵ / ₈ %	1999	15,000	15,000
		Series M	7 ³ / ₄ %	2002	20,000	20,000
		Series O	12 ¹ / ₂ %	2012	629	1,379
		Series P	9 ¹ / ₄ %	2016	25,000	25,000
		Series Q	9 ¹ / ₄ %	2018	50,000	50,000
		Series R	9 ¹ / ₄ %	2019	50,000	50,000
		Series S	9 ¹ / ₄ %	2020	50,000	50,000
		Series T	9 ¹ / ₄ %	2021	50,000	50,000
		New England Electric Company	New England Electric Company	Series G	6 ³ / ₈ %	1992
Series I	7 ³ / ₈ %			2002	7,500	7,500
Series J	9%			2004	9,700	9,700
Series Q	9 ³ / ₈ %			2014	25,000	25,000
Series P	10 ¹ / ₄ %			2016	40,000	40,000
Series R	10 ¹ / ₄ %			2016	40,000	40,000
New England Power Company	New England Power Company	Series I	4 ³ / ₈ %	1991	20,000	20,000
		Series J	4 ³ / ₈ %	1992	12,000	12,000
		Series K	4 ¹ / ₂ %	1993	10,000	10,000
		Series L	6 ³ / ₈ %	1996	10,000	10,000
		Series M	6 ⁷ / ₈ %	1997	15,000	15,000
		Series N	7 ¹ / ₈ %	1998	20,000	20,000
		Series O	7 ³ / ₈ %	1998	20,000	20,000
		Series P	8 ³ / ₈ %	1999	15,000	15,000
		Series R	7 ⁵ / ₈ %	2002	25,000	25,000
		Series S	8 ³ / ₈ %	2003	40,000	40,000
General and refunding mortgage bonds	New England Power Company	Series N	8 ³ / ₈ %	1993	40,000	40,000
		Series A	8 ⁵ / ₈ %	2007	50,000	50,000
		Series B	9 ¹ / ₂ %	2008	50,000	50,000
		Series F	16 ³ / ₈ %	2012		491
		Series D	9 ⁷ / ₈ %	2013	90,000	90,000
		Series G	9 ⁷ / ₈ %	2013	16,150	16,150
		Series I	10 ¹ / ₂ %	2013	16,600	16,600
		Series J	10 ⁵ / ₈ %	2013	79,250	79,250
		Series K	7 ¹ / ₄ %	2015	38,500	38,500
		Series L	7.80%	2016	29,850	29,850
		Series M	9 ³ / ₈ %	2016	50,000	50,000
		Series O	variable	2018	28,750	28,750
		Series P	variable	2019	4,100	4,100
Series Q	variable	2019	17,100	17,100		
Unamortized discounts and premiums				70,000	19,200	
Total long-term debt				<u>\$1,625,000</u>	<u>\$1,465,600</u>	

The accompanying notes are an integral part of these financial statements.

New England Electric System and Subsidiaries
Consolidated Statement of Cash Flows

		1989	1988	1987
Operating activities	Net income (loss)	\$ 138,650	\$ (53,820)	\$ 171,206
	Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
	Depreciation and amortization	258,767	230,357	180,198
	Investment tax credits—net	(4,854)	(6,414)	(2,619)
	Deferred federal and state income taxes	(16,067)	(90,438)	21,701
	Rate settlement write-down		260,213	
	Allowance for funds used during construction	(29,746)	(4,115)	(40,893)
	Minority interests, principally AFDC	5,491		
	Decrease (increase) in accounts receivable, less reserves	(12,289)	(17,673)	(34,968)
	Decrease (increase) in fuel, materials and supplies	(4,685)	(4,712)	15,763
	Increase (decrease) in accounts payable	(20,091)	18,033	22,457
	Increase (decrease) in other current liabilities	11,034	(34,056)	39,673
	Other, net	(22,752)	11,192	13,608
	Net cash provided by operating activities	<u>\$ 227,167</u>	<u>\$ 306,565</u>	<u>\$ 386,186</u>
	Investing activities	Construction expenditures, excluding allowance for funds used during construction:		
Hydro-Quebec Phase 2 project		\$(819,197)		
Other projects		(212,710)	\$(192,359)	\$(165,217)
Oil and gas exploration and development		(54,092)	(59,849)	(54,734)
Sale of interest in coal ship (Note D-3)		18,263		
Increase in other investments		(1,558)	(2,200)	(13,150)
Net cash provided by (used in) investing activities		<u>\$(569,294)</u>	<u>\$(254,408)</u>	<u>\$(233,101)</u>
Financing activities	Proceeds from NEES common shares issued	\$ 138,515	\$ 35,807	\$ 43,891
	Contributions to subsidiaries by minority interests	48,739		
	Dividends paid on NEES common shares	(118,660)	(115,646)	(110,016)
	Preferred stock—retirements			(27,445)
	Long-term debt—issues	386,100	82,900	25,000
	Long-term debt—retirements	(361,241)	(50,400)	(35,250)
	Changes in short-term debt		(28,750)	(16,300)
	Net cash provided by (used in) financing activities	<u>\$ 273,453</u>	<u>\$ (76,089)</u>	<u>\$(120,120)</u>
	Net increase (decrease) in cash and cash equivalents	\$ 1,266	\$ (23,932)	\$ 32,965
	Cash and cash equivalents at beginning of year	10,724	34,656	1,691
Cash and cash equivalents at end of year	<u>\$ 11,990</u>	<u>\$ 10,724</u>	<u>\$ 34,656</u>	
Supplementary information	Interest paid less amounts capitalized	\$ 15,076	\$ 58,718	\$ 77,169
	Federal and state income taxes paid	\$ 13,000	\$ 23,667	\$ 62,648

The accompanying notes are an integral part of these consolidated financial statements.

Notes A

Significant accounting policies

1. Basis of consolidation and system of accounts

The consolidated financial statements include the accounts of New England Electric System (NEES) and all subsidiaries except NEES Energy, Inc. and New England Transmission Corporation (NEET), which are recorded at equity. Presentation of these two subsidiaries on the equity basis is not material to the consolidated financial statements. In addition, four regional nuclear generating companies (Yankees) in which New England Power Company (NEP) has a minority ownership interest are valued at equity. NEES owns 50.4 percent of the outstanding common stock of both New England Hydro-Transmission Electric Company, Inc. and New England Hydro-Transmission Corporation (Hydro-Transmission companies). The consolidated financial statements include 100 percent of the assets, liabilities and earnings of the Hydro-Transmission companies. Since NEES is the majority stockholder in these companies, the ownership interests of the other stockholders are called minority interests and have been separately disclosed on the 1988 consolidated income statement and balance sheet. All significant intercompany transactions between consolidated subsidiaries have been eliminated. The accounts of NEES and its subsidiaries are maintained in conformity with the Uniform System of Accounts prescribed by regulatory agencies having jurisdiction.

2. Revenue

The utility subsidiaries record revenue on a cycle billing basis. No revenue is recorded for electricity that has been delivered but not billed.

3. Allowance for funds used during construction (AFDC)

The utility subsidiaries capitalize, as part of construction costs, AFDC, which represents the composite interest and equity costs of capital funds used to finance that portion of construction costs not eligible for inclusion in rate base. In 1989, an average of \$35 million of construction work in progress (CWIP) was included in rate base. AFDC is capitalized in "Utility Plant" with offsetting credits to "Other income" and "Interest." This method is in accordance with an established rate-making practice under which a utility is permitted a return on, and the recovery of, prudently incurred capital costs through their ultimate inclusion in rate base and in the provision for depreciation. The composite AFDC rates, excluding the Hydro-Transmission companies, were 10.1 percent, 10.9 percent and 11.3 percent in 1989, 1988 and 1987, respectively. The Hydro-Transmission companies capitalize all interest costs and a return on common equity.

In the "Statements of Consolidated Income (Loss)", the borrowed funds component of AFDC is presented gross of related deferred federal income taxes. AFDC in 1988 and 1987 was previously presented net of related deferred federal income taxes. These years have been reclassified to be consistent with the 1989 presentation.

4. Depreciation and amortization

The depreciation and amortization expense included in the "Statements of Consolidated Income (Loss)" is composed of the following:

Year ended December 31 (the amount in thousands)	1989	1988	1987
Depreciation	\$222,452	\$192,106	\$ 93,236
Amortization			
Oil conservation adjustment	55,275	55,275	55,275
Intangible assets (Note C)	29,375	21,037	
Property losses (Note F)	12,371	12,371	(1,184)
Oil conservation adjustment	7,498	(2,801)	4,586
Total depreciation and amortization expense	\$286,881	\$229,060	\$170,918

charges for coal conversion facilities of the Yankee Nuclear Station and of savings from burning coal. A decline in the savings occurred in recent years due to the decline in oil prices. As a result of this decline, in 1989 NEP implemented a minimum rate level designed to achieve full recovery by the mid-1990's. At December 31, 1989, unamortized coal conversion costs were \$58,320,000.

5. Nuclear fuel disposal and nuclear plant decommissioning

The Nuclear Waste Policy Act of 1982 establishes that the federal government is responsible for the disposal of spent nuclear fuel. The federal government requires NEP to pay a fee based on its share of the generation from the Millstone 3 nuclear unit. NEP is recovering this fee through its fuel clause. Similar costs are incurred by the Yankee nuclear companies which are billed to NEP and recovered from customers through NEP's fuel clause.

Also, NEP is recovering through depreciation expense its share of estimated decommissioning costs for Millstone 3 amounting to \$24 million in 1987 dollars. NEP's decommissioning cost accruals are recorded on its books consistent with its rate recovery. In addition, NEP is paying through purchased power expense its portion of decommissioning costs for the four Yankees. Such costs reflect estimates of total decommissioning costs approved by the Federal Energy Regulatory Commission (FERC).

There is no assurance that decommissioning costs actually incurred by the Yankee companies or Millstone 3 will not substantially exceed these amounts. However, a recent Nuclear Regulatory Commission (NRC) rule established minimum funding levels that licensees must satisfy on or before July 26, 1990. It is expected that by that date each of the nuclear units in which NEP has an ownership interest will meet or exceed the minimum funding requirements of the NRC.

6. Oil and gas operations

New England Energy Incorporated (NEEI) participates in domestic oil and gas exploration, development and production through a partnership with a non-affiliated oil company. Until December 27, 1989, NEEI also owned and operated, through a joint venture, a coal-carrying ship, chartered to NEP. (See Note D-3.)

NEEI follows the full cost method of accounting for its oil and gas operations, under which capitalized costs (including interest paid to banks) relating to wells and leases determined to be either commercial or non-commercial are amortized using the unit of production method.

NEEI operates under an intercompany pricing policy (Pricing Policy) approved by the Securities and Exchange Commission (SEC) under the Public Utility Holding Company Act of 1935. Pursuant to the Pricing Policy, NEEI's oil and gas activities are divided into a rate regulated program and a non-rate regulated program. The rate regulated program is composed of prospects obtained through December 31, 1983, and savings and losses realized from this program are passed on to NEP and ultimately to retail customers. The non-rate regulated program is composed of prospects obtained since January 1, 1984 and operates independently of NEP. NEEI stopped acquiring new oil and gas prospects after December 31, 1986 due to market conditions and the outlook for the future. However, NEEI will continue to incur costs in connection with activities relating to existing prospects.

The 1988 NEP rate settlement, described in Note C, favorably resolved uncertainty over the ability of NEP to recover past and future rate regulated program losses from its customers by allowing NEP to pass them through its fuel clause. Due to petroleum declines in oil and gas market prices, beginning in 1986 the rate regulated program has generated a steadily increasing loss which is expected to continue, generating substantial additional losses in the future, which will be passed on to NEP. As a result of the Pricing Policy, NEEI's rate regulated program has not been subject to certain SEC accounting rules, specifically to non-rate regulated companies, which limit the costs of oil and gas property that can be passed on. Under the settlement, NEEI rate regulated program costs incurred subsequent to March 3, 1988 could be subject to a FERC prudence review if they relate to decisions or commitments made after that date.

costs, in which all operating profits that exceed after the payment of a royalty and previously incurred losses would be retained by NEE. However, it is unlikely that the conditions will be satisfied given the current market and the outlook for the future.

NEE's costs incurred and capitalized in connection with its oil and gas exploration and development activities are as follows:

Year ended December 31 (thousands of dollars)	1989	1988	1987
Leases	\$ 1,471	\$ 4,675	\$ 1,395
Exploration	20,646	14,630	9,152
Development	(3,938)	7,493	11,920
Capitalized interest costs	33,362	30,817	28,660
Other	2,551	2,228	3,607
Total	\$54,092	\$59,849	\$54,734

Included in the above amounts for 1989, 1988 and 1987, respectively, are lease costs of \$564,000, \$1,076,000 and \$1,521,000, exploration costs of \$14,119,000, \$4,381,000 and \$2,752,000, development costs of \$1,149,000, \$2,327,000 and \$3,120,000 and other costs of \$245,000, \$10,000 and \$(399,000), which relate to the non-continuing operations program.

7. Cash

NEE and its subsidiaries classify short-term investments with a maturity of 90 days or less as cash. Current banking arrangements do not require outstanding checks to be funded until actually presented for payment. Outstanding checks are, therefore, recorded in accounts payable until such time as the banks present them for payment.

Note B

Federal income taxes

Total federal income taxes in the "Statements of Consolidated Income (Loss)" are as follows:

Year ended December 31 (thousands of dollars)	1989	1988	1987
Income taxes charged to operations	\$ 34,728	\$ 30,945	\$ 80,227
Income taxes charged (credited) to "Other income"	1,021	(2,519)	1,352
Income tax on rate settlement write-down (Note C)		(68,428)	
Total federal income taxes	\$ 35,749	\$ (40,002)	\$ 81,579

Total federal income taxes, as shown above, consist of the following components:

Year ended December 31 (thousands of dollars)	1989	1988	1987
Current income taxes	\$ 40,323	\$ 48,804	\$ 44,928
Deferred income taxes	(10,728)	(82,392)	19,270
Investment tax credits - net	(4,254)	(6,414)	(2,619)
Total federal income taxes	\$ 25,341	\$ (40,002)	\$ 61,579

Certain subsidiaries, with regulatory approval, have adopted comprehensive interperiod tax allocation (normalization). The following table details the components of the deferred federal income taxes of these subsidiaries:

Year ended December 31 (thousands of dollars)	1989	1988	1987
Allowance for borrowed funds used during construction	\$ (769)	\$ 318	\$ 5,968
Other construction costs capitalized for book purposes and deducted for tax purposes	2,057	3,533	7,818
Costs associated with utility plant retirements deducted for tax purposes	4,538	4,985	3,591
Excess tax depreciation	11,694	13,361	17,814
Rate settlement write-down (Note C)		(68,428)	
Seabrook 1 recovery (Note C)	(9,537)	(6,349)	
Property loss amortization	(4,877)	(4,877)	487
Refunds		11,269	(19,980)
Unbilled revenue	(8,133)	(3,338)	(3,113)
Contributions in aid of construction	(2,952)	(3,421)	(3,674)
Conservation and load management costs capitalized	7,247		
Coal ship settlement (Note D-3)	(7,538)		
Oil and gas program	(7,434)	(16,042)	(1,454)
Accrued revenue for NEEI losses	485	(3,478)	11,158
Other	(4,501)	(9,925)	655
Deferred federal income taxes	<u>\$ (19,720)</u>	<u>\$ (82,392)</u>	<u>\$ 19,270</u>

The Tax Reform Act of 1986 reduced the corporate tax rate from 46 percent to an average rate of 40 percent in 1987 and 34 percent thereafter. New accounting rules issued by the Financial Accounting Standards Board (FASB), which are expected to become effective in 1992, will require all deferred tax balances to be restated at the 34 percent rate or the rate in effect at that time, if different. Using the 34 percent tax rate, the System would have excess reserves for deferred income taxes of approximately \$56 million at December 31, 1989. Approximately \$39 million of this excess relates to NEEI. It is expected that through the regulatory process, excess reserves for deferred income taxes will be passed back to ratepayers with no significant impact on net income. Accordingly, any excess will be reclassified from a deferred tax liability account to a customer-related liability account. As can be seen in the table below, such pass-back commenced in 1987.

In addition, the new FASB rules will require utilities to establish new deferred tax reserves, including deferred taxes on the equity component of AFDC and NEP's OCA amortization, which have not previously been considered subject to deferred tax accounting. This additional tax reserve will be offset by the establishment of a regulatory asset representing amounts ultimately recoverable from ratepayers. Therefore, the application of this new rule is not expected to have a significant impact on net income.

Year ended December 31 (thousands of dollars)	1989	1988	1987
Computed tax at statutory rate	\$ 62,800	\$(28,305)	\$105,907
Increases (reductions) in tax resulting from:			
Allowance for equity funds used during construction	(4,176)	(670)	(10,115)
Rate settlement write-down (Note C)		15,696	
Reversal of deferred taxes recorded at a higher rate	(12,343)	(14,481)	5,177
OCA tax benefits	(2,190)	(5,618)	(4,023)
Book versus tax depreciation not normalized	2,606	2,638	3,140
Amortization of investment tax credits	(8,510)	(7,050)	(6,978)
All other differences	(2,528)	(2,172)	(1,170)
Total federal income taxes	\$ 35,749	\$(40,002)	\$ 81,579
Effective federal income tax rate*	19.3%	(48.1)%	30.8%

* The effective federal income tax rate excluding NEEI was 27.8%, (32.2)% and 33.2% for the years 1989, 1988 and 1987, respectively.

Federal income tax returns for NEEI and its subsidiaries have been examined and reported on by the Internal Revenue Service (IRS) through 1985. See Note D-6 for further information regarding the recently completed examination of the 1984 and 1985 tax returns.

Note C 1988 Rate settlement

In the second quarter of 1988, NEP settled three wholesale rate cases and two petitions filed by an intervenor. The settlement, which was approved by the FERC in September 1988: (1) resolved all issues associated with NEP's pre-1988 investment in the Seabrook Nuclear Generating Station Unit 1 (Seabrook 1); (2) allows NEP to recover, through its fuel clause, its payments to its affiliate, NEEI, for costs resulting from NEEI's oil and gas exploration and development activities undertaken from 1974 through 1983 (rate regulated program); and (3) settled all issues associated with NEP's cost of providing service under its prior rates and rates in effect at the time of the settlement without further refunds.

The prudence of certain NEEI rate regulated program costs incurred subsequent to March 1, 1988 could be subject to FERC review. (See Note A-6.)

The settlement limits NEP's recovery of its pre-1988 investment in Seabrook 1 to \$61 million per year for seven years and five months. If Seabrook 1 is cancelled, the settlement also requires NEP to reduce the annual level of its rates by \$12 million for a period of five years. However, if the unit enters commercial operation, NEP is allowed to collect an additional \$16.8 million per year for five years, subject to reductions if the NRC's operating license for the unit contains any power output level restrictions. If, after entering commercial operation, the unit is subsequently cancelled or abandoned within defined time periods, NEP would be required to cease collecting and/or refund the additional revenue, depending upon the circumstances of the cancellation or abandonment. Recovery of Seabrook 1 costs incurred after January 1, 1988 is subject to FERC approval. (See Note D-1.)

As a result of these limitations on recovery of its Seabrook 1 investment, NEP recorded an after-tax write-down of \$179 million (\$200 million before tax) in the second quarter of 1988. The write-down was recorded in other income and reflects the write-down of NEP's Seabrook 1 investment offset by certain other related adjustments, primarily the reversal of \$13 million after tax (\$23 million before tax) of previously established refund reserves. The write-down assumed Seabrook 1 would be cancelled

If Seabrook 1 enters commercial operation and NEP is satisfied that various other conditions have been met, it will be able to make appropriate accounting adjustments to reflect the settlement provisions, including the additional revenues that will be realized under the settlement and to reverse the impacts of having assumed cancellation in the initial write-down. The impact of these adjustments, assuming no power output level restrictions in the operating license, would be to increase net income by approximately \$115 million after tax.

As a result of the settlement, in the second quarter of 1988, NEP also stopped recording AFDC on its pre-1988 Seabrook 1 investment and began amortizing the portion of such investment being recovered under the settlement over seven years and five months. The pre-1988 Seabrook 1 investment, after the settlement write-down, is shown on a separate line on the balance sheet net of amortization. Investments in Seabrook 1 since January 1, 1988 are included in the "Construction work in progress" line on the balance sheet and amount to \$48 million, including AFDC, as of December 31, 1989. (See discussion in Note D-1 for reserves recorded for costs incurred since January 1, 1988.)

Note D

Commitments and contingencies

1. Seabrook 1 nuclear unit

NEP owns approximately 10 percent of the 1,150 MW Seabrook 1 nuclear unit, located in Seabrook, New Hampshire.

Uncertainties regarding the recovery through rates of NEP's investment in Seabrook 1 through December 31, 1987, were resolved through the 1988 NEP rate settlement. (See Note C for additional information regarding the settlement.) Recovery through rates of NEP's investment in Seabrook 1 after January 1, 1988 is subject to FERC approval, and the prudence of such investment could be challenged in future FERC rate proceedings. These expenditures have amounted to \$48 million through December 31, 1989. Under current FERC policies, if Seabrook 1 enters commercial operation, NEP will be permitted to recover all post-December 31, 1987 expenditures found by the FERC to have been prudently incurred. If the unit is cancelled, under the FERC's policy, NEP will be allowed to collect only 50 percent of prudently incurred post-December 31, 1987 costs, but will be allowed to earn a return on the amount being recovered from customers. NEP has already written off, as a part of the \$179 million rate settlement write-down, 50 percent of all Seabrook 1 cash costs that were estimated to be incurred during 1988 and 1989. In addition, since 1988 NEP has written off 50 percent of all Seabrook 1 AFDC.

Construction of Seabrook 1 was completed in 1986, but the unit cannot enter commercial operation until an unconditional operating license is issued by the NRC. Chiefly due to financial obligations resulting from its 35.6 percent ownership share of Seabrook, Public Service Company of New Hampshire (PSNH) declared bankruptcy in January 1988, and it now appears that Northeast Utilities will acquire PSNH, including its Seabrook interest.

Low-power testing of Seabrook 1 was conducted in May and June, 1989. During an additional test after low-power testing was complete, operator error led to a delay of several minutes in shutting down the plant in response to a malfunctioning steam valve on the non-adjacent side of the plant. The incident led to an agreement that the project would not resume testing without NRC concurrence, which was given in January 1990. Seabrook project management has initiated new operating and reporting procedures in response to the incident. The NRC requires a full-scale safety analysis to be completed.

The general safety of nuclear generating operations is a concern of Seabrook 1 emergency response plans and the safety of Seabrook 1 has been a concern of the state of New Hampshire, Massachusetts and New Hampshire. A number of parties, including elected federal, state and local officials, are opposed to operation of the plant and approval of emergency response plans.

...due to Massachusetts' refusal to submit a duly prepared plan. The NRC licensing board issued a decision on November 13, 1989 authorizing the NRC's director of nuclear regulation to issue a license for operation of the unit at full power. Appeals of this and many other licensing decisions are pending within the NRC and in the courts. On November 16, 1989, the NRC commissioners issued an order indicating that they, rather than the NRC's appeal board, would consider all applications to stay the effectiveness of the licensing board's authorization of a full-power license. The commissioners held a meeting on full-power license issues on January 18, 1990. In February 1990, the chairman of the NRC indicated that the three commissioners who will rule on the issuance of a full-power license are satisfied with the safety of the plant and with the adequacy of emergency response plans. A vote by the NRC is scheduled for early March. Although there is still no assurance that Seabrook 1 will achieve commercial operation, there is increased likelihood that it will operate. The Massachusetts Attorney General has indicated that he will appeal any decision that is favorable to the project. It is not clear whether such an appeal would cause further delay in commercial operation.

In 1989, PSNH agreed, with the approval of the bankruptcy court, to fund, for a period of time, the share of ongoing project expenditures no longer being paid by the Massachusetts Municipal Wholesale Electric Company (MMWEC). These PSNH payments might be exhausted prior to commercial operation and it is uncertain whether MMWEC would begin making its required payments at that time or whether other arrangements would be made to meet MMWEC's share of project expenses.

2. Oil and gas operations

For a discussion relating to the recovery by the System of its investments in oil and gas properties, see Note A-6.

3. Coal ship agreement

Two NEES subsidiaries, NEEL and NEP, consummated an agreement in December 1989 with Keystone Shipping Co. (Keystone) pertaining to a joint venture between NEEL and Keystone. NEEL was a 51 percent owner in the joint venture, which owned a coal-carrying ship that was chartered to NEP through 2008.

As a result of the agreement, the ship was sold to an affiliate of Keystone, the joint venture was terminated and NEP entered into a new long-term charter of the ship to continue transportation of coal to two of NEP's generating stations. The agreement also resolved arbitrations that were pending concerning the appropriateness of the charter hire rate that had been paid by NEP during 1983 through 1989. Implementation of the agreement resulted in a nonrecurring gain in NEES 1989 earnings of approximately \$.16 per average share. The gain resulted in part from tax benefits from the sale and in part from the reversal of previously accrued litigation reserves.

4. Brayton Point outage

The System's largest generating unit, Brayton Point Unit 3, experienced a six-month outage in 1985, due to a major coal silo failure. The incremental cost of replacement power for that outage, which amounted to \$16 million, was included in NEP's fuel clause billings.

NEP sought to recover damages for the silo failure from Stone & Webster Engineering Corporation (S&W) and others in Massachusetts Superior Court. In November 1986, NEP executed an agreement with the Rhode Island Attorney General whereby the Attorney General agreed not to initiate any regulatory proceeding concerning the outage until NEP's dispute with S&W is resolved. In December 1989, the court granted a motion for summary judgment in favor of S&W. Similar motions filed by other defendants are pending.

5. Construction expenditures

The utility subsidiaries' construction expenditures, excluding AFDC, are estimated to be \$290 million in 1990. Included in this estimate is \$55 million related to the Hydro-Quebec Phase 2 project. The oil and gas subsidiary's expenditures, including costs of capital, for its exploration and development programs in 1990 are estimated to be \$50 million. (See Note A-6.) At December 31, 1989, substantial commitments had been made relative to future planned expenditures.

6. Federal tax assessments

In connection with a recently completed examination of the System's 1984 and 1985 tax returns, the IRS has taken the position that no abandonment of the Seabrook Unit 2 took place in either 1984 or 1985. Accordingly, the IRS disallowed the abandonment loss and related tax deductions claimed in the 1984 and 1985 returns, which has resulted in substantial proposed tax deficiencies. The System is appealing these disallowances. If the IRS' position is ultimately upheld, the System would be required to pay the tax deficiencies (approximately \$19.4 million which includes related state deficiencies) plus interest. As of December 31, 1989, interest on the proposed deficiencies would be approximately \$13.7 million. NEP has provided approximately \$6.8 million of interest accruals relating to this matter. This interest will be tax deductible.

NEP has recorded the tax benefit of the Seabrook 2 deduction in a deferred tax reserve and has been passing on such benefit to customers. Should the tax benefit of the abandonment loss deduction ultimately realized be at a rate less than the 46 percent rate applicable in 1984, NEP would seek to have its Seabrook 2 rate recovery modified to reflect such lower benefit.

7. Franchise tax assessments

In November 1987 and June 1989, NEP paid assessments of additional Massachusetts franchise taxes totaling approximately \$8 million (including interest) for the years 1982 through 1987. The assessments relate to the method of calculating the portion of NEP's income that is taxable in Massachusetts. In April 1989, the Massachusetts Department of Revenue (DOR) abated and refunded to the Company approximately \$3 million, including \$.5 million of interest, related to 1982. This abatement, however, has no bearing on the DOR's position on this disputed issue with respect to later years.

NEP disagrees with the Commonwealth's position on this issue. Accordingly, these amounts have not been charged to expense. NEP has filed petitions with the Massachusetts Appellate Tax Board seeking refunds of the 1983 and 1984 assessments and a hearing was held before the Board on this matter on September 19, 1989. The Board has not yet issued its decision. NEP has applied for abatement of the 1985 through 1987 assessments. The exposure for the unassessed years (1988 and 1989) is estimated to be approximately \$1 million.

8. Natural gas pipeline capacity

In connection with NEP's efforts to reduce sulfur dioxide emissions and repower generating units, NEP has signed conditional agreements that could lead to firm contracts for natural gas pipeline capacity. These agreements, when all the conditions are approved and accepted by NEP and the other parties, will require minimum fixed payments, beginning as early as 1991. Such minimum payments have not been firmly established at this time but are expected to be significant.

9. Ocean State Power equity contributions

In conjunction with a new wholly-owned subsidiary's 20 percent interest in partnerships constructing the Ocean State Power project, NEES has committed to make up to approximately \$45 million of equity contributions as each of the two units in the project achieves commercial operation.

10. Hazardous waste

NEES and its utility subsidiaries have been contacted by federal and state environmental agencies regarding potential joint and several liability for cleanup of sites at which they either have, or are alleged to have, disposed of material designated as hazardous waste.

Approximately 16 parties, including NEES, had been notified by the Environmental Protection Agency (EPA) that they were potentially responsible for cleanup of the Pine Street Canal Superfund site in Burlington, Vermont, which is contaminated by coal tar and other materials. On December 5, 1988, the U.S. Department of Justice filed suit in federal district court in Vermont against NEES and two other parties to recover all past and future response costs incurred by the EPA for removal of coal tar wastes at the Pine Street Canal site. On January 9, 1990, the United States settled in principle with all the parties in the litigation, including NEES. Under the terms of the settlement, the EPA will recover its past removal costs. NEES recorded its share of these costs in 1989. However, the settlement does not cover any of the EPA's ongoing and future response costs at the Pine Street Canal site.

On March 24, 1989, a complaint was filed against NEES and its subsidiary, Massachusetts Electric, as well as other non-affiliated entities, by private parties seeking damages for the alleged disposal of hazardous waste from a coal gasification plant previously operated in Lynn, Massachusetts. Lynn Gas and Electric Company, a former subsidiary of NEES, owned and operated this facility. In 1973, NEES sold the gas portion of this business. The electric portion of this business had been previously taken over by Massachusetts Electric, which still owns parcels of land at this location.

While NEES and its utility subsidiaries cannot estimate the costs which may result from these matters, they do not believe at this time that such costs would be material to its financial position.

11. Price-Anderson Act

The Price-Anderson Act provides nuclear liability indemnification that limits public liability from a single incident at a nuclear plant to \$7.6 billion. The primary financial protection is provided by purchasing the maximum amount of available insurance of \$200 million. Additional protection of \$7.4 billion would be provided by an assessment of up to \$66.2 million per incident levied on each of the nuclear units in the United States, subject to a maximum assessment of \$10 million per incident per nuclear unit in any year. NEP's current interest in the Yankee companies, Millstone 3 and Seabrook 1 would subject NEP to a \$68.2 million maximum assessment which it would be liable to pay with respect to an incident at a nuclear plant. NEP's payment of this assessment would be limited to a maximum of \$10.3 million per incident per year.

Note E Retirement plans

The System's plans are noncontributory defined-benefit plans covering substantially all employees. The plans provide pension benefits based on the employee's compensation during the five years before retirement. The System's funding policy is to contribute each year the net periodic pension cost for that year. However, the contribution for any year will not be less than the minimum required contribution under federal law or greater than the maximum tax deductible amount.

Total pension cost was \$10.5 million in 1989, \$6.9 million in 1988 and \$4.8 million in 1987. The increase in pension cost in 1989 reflects plan improvements made during the year. The 1988 increase includes additional service credits granted to employees. The increase in both 1989 and 1988 also reflects additional costs recognized on certain formal supplemental plans.

Total pension cost for 1989, 1988 and 1987 included the following components:

Year ended December 31 (thousands of dollars)	1989	1988	1987
Service cost—benefits earned during the period	\$ 9,360	\$ 8,381	\$ 7,808
Plus (less):			
Interest cost on projected benefit obligation	38,479	34,769	32,476
Expected return on plan assets	(37,408)	(35,999)	(34,576)
Amortization	108	(202)	(878)
Total pension cost	<u>\$10,539</u>	<u>\$ 6,949</u>	<u>\$ 4,830</u>
Assumptions used to determine pension cost were:			
Discount rate	8.5%	8.5%	8.5%
Average rate of increase in future compensation levels	6.7%	6.7%	6.7%
Expected long-term rate of return on assets	9.0%	9.0%	9.0%
Actual return on plan assets	\$52,646	\$39,328	\$28,523

The following table sets forth the plans' funded status:

	December 31, 1989		December 31, 1988	
	Retirement Plans (In thousands)			
	Regular Plans	Supplemental Plans	Regular Plans	Supplemental Plans
Benefits earned				
Actuarial present value of accumulated benefit liability:				
Vested	\$393,413	\$26,235	\$354,864	\$14,082
Non-vested	19,554	157	14,609	108
Total	<u>\$412,967</u>	<u>\$26,392</u>	<u>\$369,473</u>	<u>\$14,190</u>
Reconciliation of funded status				
Actuarial present value of projected benefit liability	\$478,268	\$29,244	\$442,960	\$16,850
Unrecognized prior service costs	(9,389)	(4,272)	(556)	(222)
FAS 87 transition liability not yet recognized (amortized)	—	(7,805)	—	(8,456)
Net gain (loss) not yet recognized (amortized)	1,394	1,815	(13,260)	2,160
	<u>470,273</u>	<u>18,982</u>	<u>429,144</u>	<u>10,332</u>
Pension fund assets at fair value	487,716	—	447,318	—
FAS 87 transition asset not yet recognized (amortized)	(18,918)	—	(20,360)	—
	<u>468,798</u>	<u>—</u>	<u>426,958</u>	<u>—</u>
Accrued pension payments recorded on books	<u>\$ 1,475</u>	<u>\$18,982</u>	<u>\$ 2,186</u>	<u>\$10,332</u>

Plan assets are composed primarily of guaranteed investment contracts and corporate equity and debt securities.

Certain health care and life insurance benefits are provided to substantially all retired employees. Such benefits are not funded by the System. The cost of these benefits is charged to expense when paid and was estimated to be \$10.1 million in 1989, \$8.4 million in 1988 and \$7.6 million in 1987.

Note F
Property losses

Included in the "Consolidated Balance Sheets" under "Unamortized property losses" are the unamortized portions of the costs of two cancelled nuclear generating projects at a discounted value.

In 1981, a non-affiliated company announced cancellation of plans to build the Pilgrim 2 nuclear generating unit in Plymouth, Massachusetts. As a part-owner, NEP had expended approximately

\$50 million (\$29 million after tax) on the unit. In 1982, NEP began to amortize and recover these costs through rates over an eight-year period.

NEP is a joint owner of the cancelled Seabrook 2 nuclear generating unit. At December 31, 1987, NEP had expended approximately \$69 million (\$39 million after tax) on the unit. In March 1986, NEP commenced recovery of this loss over a five-year period, subject to refund. In a January 1988 decision, the FERC permitted NEP to recover all of its Seabrook 2 costs but modified the recovery period to 10 years. Accordingly, in December 1987, NEP reversed a portion of its Seabrook 2 amortization and established refund provisions, which reduced revenues, in order to reflect the 10-year recovery period. This adjustment had no impact on net income.

NEP has been allowed to recover through rates over time, costs incurred in connection with a number of property losses, including Seabrook 2 and Pilgrim 2. However, it has not been allowed to include any of these amounts in rate base and has, therefore, not earned a return on the unamortized balance during the recovery period. Under FASB accounting rules, NEP was required to record the unamortized balance of these property losses at a discounted value. This requirement resulted in a restatement of prior years' income equal to the effect of such discounting. The after-tax effect of the discounting write-down on retained earnings for the Seabrook 2 and Pilgrim 2 property losses as of December 31, 1987 was \$9.2 million.

Note G
Short-term borrowing

NEES and its consolidated subsidiaries have lines of credit with banks totaling \$220 million, none of which was being used at December 31, 1989. There are no compensating balance arrangements. Fees are paid in lieu of compensating balances on most lines of credit.

Note H
Share capital of New England Electric System

NEES issued additional common shares, \$1 par value, as follows:

Year ended December 31 (thousands of dollars)	1989		1988		1987	
	Par	Paid-in capital	Par	Paid-in capital	Par	Paid-in capital
Public common share issuance	\$4,000	\$100,580				
Dividend reinvestment and common share purchase plan	806	19,061	\$ 943	\$20,395	\$1,165	\$29,816
Employee share plans	576	13,492	631	13,838	464	12,446
Premium on reacquired preferred stock						(17)
	<u>\$5,382</u>	<u>\$133,133</u>	<u>\$1,574</u>	<u>\$34,233</u>	<u>\$1,629</u>	<u>\$42,245</u>

Note I

Long-term debt

The indentures relating to mortgage bonds of NEP and NEES' retail subsidiaries require sinking fund installments totaling \$7,845,000 in 1990, \$8,170,000 in 1991, \$7,970,000 in 1992, \$6,650,000 in 1993 and \$6,400,000 in 1994. The issuers of the mortgage bonds may elect to satisfy these installments in cash, in bonds, or by evidencing to the trustees additional property in amounts as provided therein. Substantially all the properties of NEP and NEES' retail subsidiaries are subject to the lien of mortgage indentures under which first mortgage bonds and general and refunding mortgage bonds have been issued.

The aggregate cash payments to retire maturing mortgage bonds and for cash sinking fund requirements on long-term notes of NEP and NEES' retail subsidiaries for the years ended December 31, 1990 through 1994 are as follows: \$37,890,000 in 1991, \$93,400,000 in 1992, \$61,400,000 in 1993 and \$6,000,000 in 1994. There are no requirements for 1990. Holders of pollution-control revenue bonds secured by NEP's Series O, P and Q general and refunding mortgage bonds can require NEP to repurchase the bonds periodically. In such event, NEP would expect to remarket such bonds at prevailing interest rates.

The annual interest requirement on the outstanding long-term debt of NEP and the retail subsidiaries at December 31, 1989 is \$97,853,000.

In May 1989, NEEL refinanced its existing \$500 million revolving credit and term loan agreements. The new revolving credit agreement provides for borrowings of up to \$400 million in two portions. The first portion is secured by a pledge of NEEL's rights with respect to NEP under the Pricing Policy covering the rate regulated program while the other portion, which applies to the non-rate regulated program, is supported by a Capital Maintenance Agreement between NEES and NEEL. (See Note A-6.) The \$319 million outstanding at December 31, 1989 was all secured under the first portion with interest rates ranging from 8.6 percent to 9.4 percent. NEEL is also required to maintain a minimum net worth of \$40 million, including subordinated notes payable to NEES. The maximum borrowing allowed under the credit agreement decreases by \$25 million each year in 1991, 1992 and 1993. In 1994, the maximum borrowing decreases by \$50 million with final maturity on December 31, 1998.

In February 1989, a \$300 million revolving credit agreement was arranged to provide financing for the Hydro-Transmission companies. The credit agreement will decrease in equal semiannual amounts beginning January 1, 1994 with final maturity on June 30, 1998. As security for borrowings under the credit agreement, these companies have assigned to the banks their rights under certain transmission support agreements and equity funding agreements and have granted the banks a mortgage on substantially all of their assets. The \$165 million outstanding at December 31, 1989 bore interest rates ranging from 8.4 percent to 9.1 percent.

Note J

Redeemable preferred stock

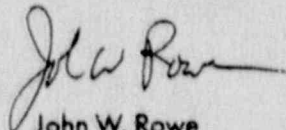
During 1987, all of NEP's 13.48% Series of cumulative preferred stock was redeemed. The redemption resulted in a charge to retained earnings of \$2,445,000.

The management of New England Electric System is responsible for the integrity of the consolidated financial statements included in this annual report. The financial statements were prepared in accordance with generally accepted accounting principles using management's informed best estimates and judgments where appropriate to fairly present the financial condition of the System and its results of operations. The information included elsewhere in this report is consistent with the financial statements.

The System maintains an accounting system and system of internal controls which is designed to provide reasonable assurance as to the reliability of the financial records, the protection of assets, and the prevention of any material misstatement of the financial statements. The System's accounting controls have been designed to provide reasonable assurance that errors or irregularities which could be material to the financial statements are prevented or detected by employees within a timely period as they perform their assigned functions. The System's internal auditing staff independently assesses the effectiveness of internal controls and recommends improvements when appropriate.

Coopers & Lybrand, the System's independent accountants, is engaged to audit and express their opinion on our financial statements. Their audit includes a review of internal controls to the extent required by generally accepted auditing standards.

The Board of Directors carries out its responsibility for the financial statements and the related financial data through its Audit Committee, which is composed solely of outside directors. The Audit Committee meets periodically with management, the internal auditor and the independent accountants to ensure that each is carrying out its responsibilities and to discuss auditing, internal accounting control and financial reporting matters. Both the internal auditor and the independent accountants have free access to the Audit Committee, without management present, to discuss the results of their audit work.



John W. Rowe
President and
Chief Executive Officer



Alfred D. Houston
Senior Vice President-Finance
and Chief Financial Officer

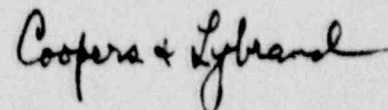
To the Board of Directors and Shareholders of New England Electric System:

We have audited the accompanying consolidated balance sheets and consolidated statements of capitalization of New England Electric System and subsidiaries (the Company) as of December 31, 1989 and 1988 and the related consolidated statements of income (loss), retained earnings and cash flows for each of the three years in the period ended December 31, 1989. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 1989 and 1988, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1989, in conformity with generally accepted accounting principles.

Boston, Massachusetts
February 28, 1990



(unaudited)

The consolidated group operates in two principal domestic industry segments.

	(thousands of dollars)	Electric	Oil and gas	Consolidated
Year ended				
December 31, 1989	Operating revenue	\$1,583,641	\$ 59,558	\$1,643,199
	Depreciation and amortization	163,182	93,699	256,881
	Other operating expenses	1,101,697	7,755	1,109,452
	Federal income taxes	58,049	(23,321)	34,728
	Operating income (loss)	260,713	(18,575)	242,138
	Interest expense	104,229	1,181	105,410
	Income from equity investments	8,444		8,444
	Other income (expense)—net	(6,523)	1	(6,522)
	Net income (loss)	\$ 158,405	\$ (19,755)	\$ 138,650
	Total assets	\$3,549,363	\$566,996	\$4,116,359
	Investments at equity	\$ 64,478		\$ 64,478
	Capital expenditures	\$ 531,907	\$ 54,092	\$ 585,999
Year ended				
December 31, 1988	Operating revenue	\$1,461,124	\$ 58,553	\$1,519,677
	Depreciation and amortization	135,247	93,813	229,060
	Other operating expenses	1,031,950	6,138	1,038,088
	Federal income taxes	57,742	(26,797)	30,945
	Operating income (loss)	236,185	(14,601)	221,584
	Interest expense	93,914	511	94,425
	Income from equity investments	7,841		7,841
	Other income (expense)—net	(188,834)	14	(188,820)
	Net income (loss)	\$ (38,722)	\$ (15,098)	\$ (53,820)
	Total assets	\$3,111,363	\$606,609	\$3,717,972
	Investments at equity	\$ 70,733		\$ 70,733
	Capital expenditures	\$ 192,359	\$ 59,849	\$ 252,208
Year ended				
December 31, 1987	Operating revenue	\$1,401,726	\$ 46,467	\$1,448,193
	Depreciation and amortization	102,028	76,890	178,918
	Other operating expenses	953,869	7,101	960,970
	Federal income taxes	101,113	(20,886)	80,227
	Operating income (loss)	244,716	(16,638)	228,078
	Interest expense	80,321	1,140	81,461
	Income from equity investments	8,723		8,723
	Other income—net	15,860	6	15,866
	Net income (loss)	\$ 188,978	\$ (17,772)	\$ 171,206
	Total assets	\$3,329,577	\$640,485	\$3,970,062
	Investments at equity	\$ 72,078		\$ 72,078
	Capital expenditures	\$ 165,217	\$ 54,734	\$ 219,951

In 1985, the SEC granted approval to divide NEEI's oil and gas exploration and development activities into two programs: a rate regulated program and a non-rate regulated program. The net loss for 1989 of \$19.8 million includes (a) a \$3.6 million loss from operations on the non-rate regulated program and (b) a \$16.2 million loss from the rate regulated program which will be passed on to customers in 1990. The net loss for 1988 of \$15.1 million includes (a) a \$0.1 million gain from operations on the non-rate regulated program and (b) a \$15.2 million loss from the rate regulated program which was passed on to customers in 1989. The net loss for 1987 of \$17.8 million includes (a) a \$0.8 million loss from operations on the non-rate regulated program and (b) a \$17.0 million loss from the rate regulated program, which was passed on to customers in 1988. See Note A-6 for a more complete discussion of oil and gas operations.

(unaudited)

The estimates of NEEI's proved reserves and proved developed reserves of oil and gas, all located within the United States, and changes to the estimated proved reserves for 1987, 1988 and 1989 are as follows:

	Crude oil and condensate (thousands of Bbl)	Natural gas (thousands of MCF)
Proved reserves as of December 31, 1986	3,137	158,568
Revisions of previous estimates	2,087	17,380
Extensions, discoveries and other additions	119	13,808
Production	(461)	(21,839)
Proved reserves as of December 31, 1987	4,882	167,917
Revisions of previous estimates	130	(3,177)
Extensions, discoveries and other additions	372	17,271
Production	(420)	(27,775)
Proved reserves as of December 31, 1988	4,964	154,236
Revisions of previous estimates	(2,634)	2,657
Extensions, discoveries and other additions	219	11,250
Production	(436)	(23,620)
Proved reserves as of December 31, 1989	2,113	144,523

	Average selling price year ended December 31,		Proved developed reserves at December 31,	
	Crude oil and condensate (per Bbl)	Natural gas (per MCF)	Crude oil and condensate (thousands of Bbl)	Natural gas (thousands of MCF)
1986	\$12.95	\$1.68	2,121	141,257
1987	\$16.45	\$1.81	1,752	149,385
1988	\$15.44	\$1.89	1,787	143,335
1989	\$16.85	\$1.84	2,015	130,792

Proved reserves are estimated quantities of crude oil, condensate and natural gas which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known oil and gas reservoirs under existing economic and operating conditions. Proved developed reserves are those proved reserves reasonably expected to be recovered through existing wells with existing equipment and operating methods. Included in the proved reserves and proved developed reserves at December 31, 1989, 1988 and 1987 are approximately 147,000 Bbls, 153,000 Bbls and 137,000 Bbls, respectively, of crude oil and condensate and 10,443,000 MCF, 13,068,000 MCF and 13,228,000 MCF, respectively, of natural gas which relate to the non-rate regulated program.

The following independent petroleum engineering consultants prepared estimates of NEEI's proved and proved developed reserves, and such estimates are included in reliance upon such consultants as experts: Paul M. Bennett and Associates of Dallas, Texas prepared the estimates for the majority of the 1989 reserves; Bennett & Westerman, Inc. of Dallas, Texas prepared the estimates for 1988 and 1987, and K & A Energy Consultants, Inc. of Houston, Texas prepared the estimates for 1986. The reserves are estimates only and should not be construed as exact quantities. Future conditions may affect the recovery of estimated reserves.

As of December 31, 1989

W. Douglas Bell

Former Chairman and
Chief Executive Officer
State Mutual Life Assurance Co.
of America

Worcester, Massachusetts

Executive Committee

Joan T. Bek

Chairman
New England Electric System
Westborough, Massachusetts

Executive Committee

James H. Hunter

Former President
James Hunter Machine Co., Inc.
North Adams, Massachusetts

Compensation Committee

Paul L. Joskow

Professor of Economics
Massachusetts Institute of
Technology
Cambridge, Massachusetts

Audit Committee

Customer Service Committee

John F. Kaslow

Executive Vice President
and Chief Operating Officer
New England Electric System
Westborough, Massachusetts

Customer Service Committee

John M. Kucharski

Chairman and
Chief Executive Officer
EG&G, Inc.
Wellesley, Massachusetts

Audit Committee

Edward H. Ladd

Chairman
Standish, Ayer & Wood, Inc.
Investment counselors
Boston, Massachusetts

Executive Committee

Joshua A. McClure

Former President
American Custom Kitchens, Inc.
Providence, Rhode Island

Audit Committee

Customer Service Committee

Malcolm McLane

Orr & Reno, P.A., Attorneys
Concord, New Hampshire

Audit Committee

Felix A. Miranda, Jr.

Private investor
New York, New York

Compensation Committee

Customer Service Committee

John W. Rowe

President and
Chief Executive Officer
New England Electric System
Westborough, Massachusetts

Executive Committee

George M. Sage

President
Bonanza Bus Lines, Inc.
Providence, Rhode Island

Executive Committee

Anne Wexler

Chairman
Wexler, Reynolds, Harrison
& Schule, Inc.
Management consultants
Washington, D. C.

Compensation Committee

James Q. Wilson

Professor of Management
The University of California
at Los Angeles

Audit Committee

As of December 31, 1989

Joan T. Bek

Chairman

John W. Rowe

President and
Chief Executive Officer

John F. Kaslow

Executive Vice President
and Chief Operating Officer

Frederic E. Greenman

Senior Vice President,
General Counsel and
Secretary

Alfred D. Houston

Senior Vice President -
Finance and Chief
Financial Officer

George P. Sasdi

Senior Vice President
and Chief Engineer

Robert O. Bigelow

Vice President

Glenn R. Schleede

Vice President

Robert C. Smith

Vice President

John H. Dickson

Treasurer

Massachusetts Electric Company

25 Research Drive
Westborough, Massachusetts 01582
Edward E. Mulligan, President

The Narragansett Electric Company

280 Melrose Street
Providence, Rhode Island 02901
Robert L. McCabe, President

Granite State Electric Company

33 West Lebanon Road
Lebanon, New Hampshire 03766
Russell A. Holden, President

New England Power Company

25 Research Drive
Westborough, Massachusetts 01582

New England Energy Incorporated

25 Research Drive
Westborough, Massachusetts 01582

**New England Electric Transmission
Corporation**

4 Park Street
Concord, New Hampshire 03301

**New England Hydro-Transmission
Corporation**

4 Park Street
Concord, New Hampshire 03301

**New England Hydro-Transmission
Electric Company, Inc.**

25 Research Drive
Westborough, Massachusetts 01582

**Narragansett Energy Resources
Company**

280 Melrose Street
Providence, Rhode Island 02901

NEES Energy, Inc.

82 Florence Street
Marlborough, Massachusetts 01752
George P. Sakellaris, President

**New England Power Service
Company**

25 Research Drive
Westborough, Massachusetts 01582

Shareholder Information

New England
Electric System
INCORPORATED

	Price range		Dividend declared	Dividend paid	Dividend yield
	High	Low			
First quarter	\$24 1/2	\$22 1/2	\$.51	\$.51	2.11
Second quarter	\$26 1/2	\$22 1/2	\$.51	\$.51	1.91
Third quarter	\$27 1/2	\$25 1/2	\$.51	\$.51	1.85
Fourth quarter	\$29 1/2	\$24 1/2	\$.51	\$.51	1.72

The total number of shareholders at December 31, 1989 was 60,647.

(thousands of dollars)	First quarter	Second quarter*	Third quarter	Fourth quarter**
1989				
Operating revenue	\$427,897	\$ 371,870	\$414,607	\$429,135
Operating income	\$ 62,854	\$ 46,299	\$ 60,648	\$ 72,377
Net income	\$ 48,968	\$ 31,304	\$ 33,044	\$ 42,688
Net income per average share	\$.71	\$.49	\$.52	\$.68
1988				
Operating revenue	\$377,124	\$ 415,777	\$409,618	\$370,766
Operating income	\$ 71,922	\$ 42,371	\$ 49,811	\$ 44,280
Net income (loss)	\$ 47,387	\$ (12,177)	\$ 37,229	\$ 28,062
Net income (loss) per average share	\$.74	\$ (.18)	\$.58	\$.43

* See Note C for a discussion of the 1988 rate settlement

** See Note D-3

Information about shareholder records, quarterly dividend payments, reinvestment of dividends, and optional cash payments may be obtained by contacting:

New England Electric System
Shareholder Services Department
Post Office Box 770
Westborough, Massachusetts 01581-0770

Shareholders may also direct questions to their shareholder services representative. The representatives listed to the right are assigned to accounts based on the first letter of each shareholder's last name.

(800) 266-9011
A-G Ruth Bergamini, extension 3177
H-M Judith Dwyer, extension 2611
N-Z Irene Thompson, extension 3185

Dividends are payable on the following dates: April, July, October, and January.

Questions about the company's financial statements should be directed to:

Investor Relations Department
Post Office Box 770
Westborough, Massachusetts 01581-0770

New York Stock Exchange
Boston Stock Exchange

NES

The annual meeting of the
England Life Policyholders

Commonwealth Edison Company
Electricity and Gas Company
Regulated by (FERC)

The name "New England Electric System" is a registered trademark of the company. A prospectus is available upon request. For more information, contact the company at the address above.

*This document is to be considered as an offer to sell or buy or solicitation of an offer to sell or buy any security.



New England Electric System

25 Research Drive

Weymouth, Massachusetts 01982

Telephone (408) 366-4011



New England Electric System

25 Research Drive

Westborough, Massachusetts 01582

Telephone: (508) 366-9011